



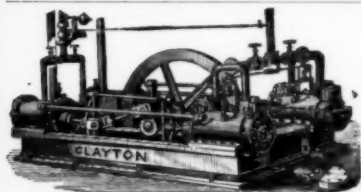
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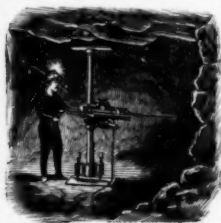
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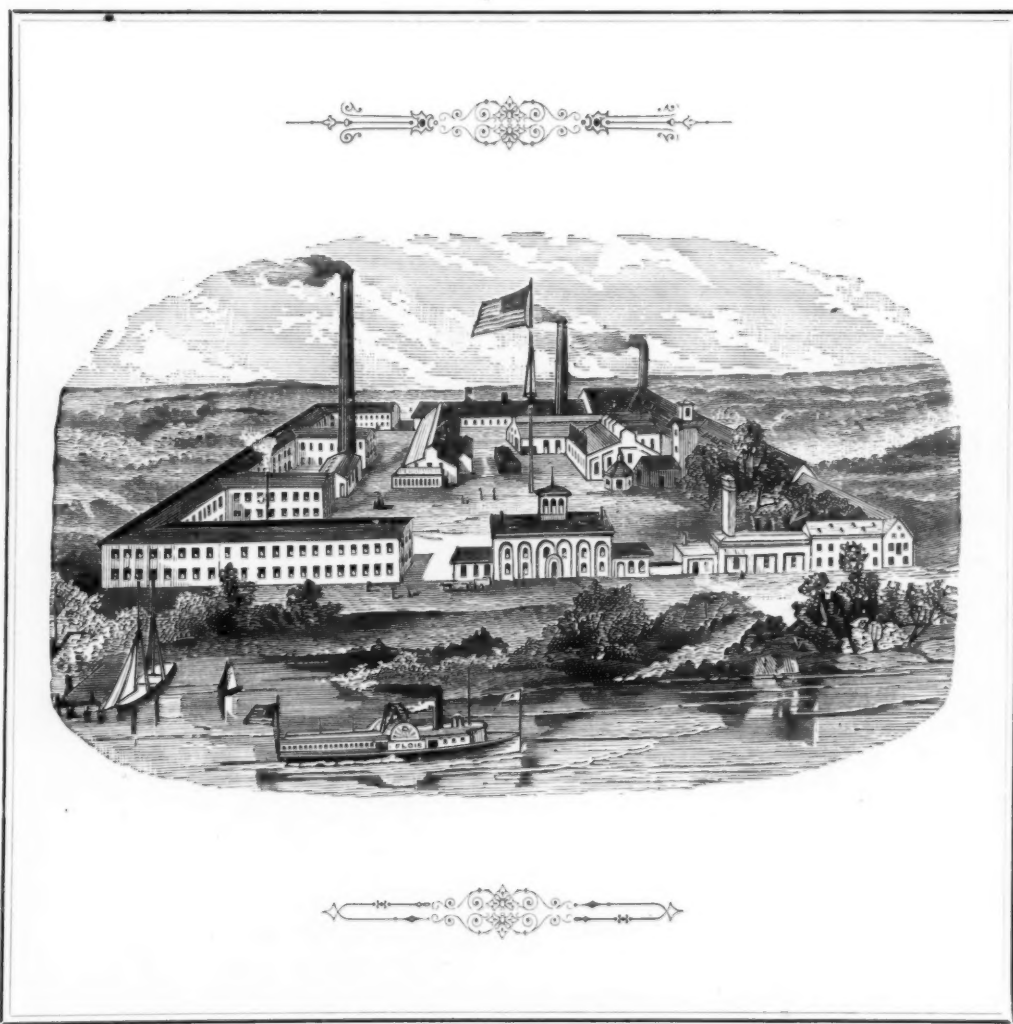
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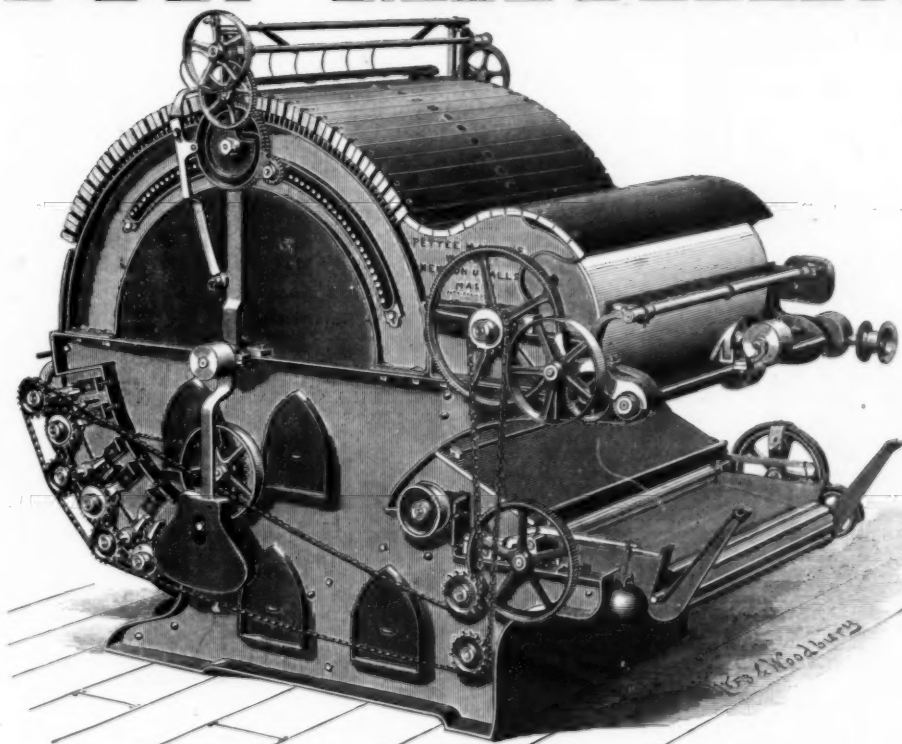
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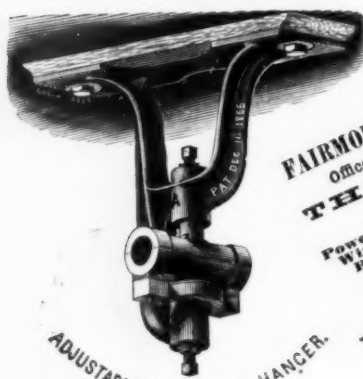
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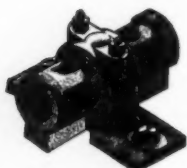
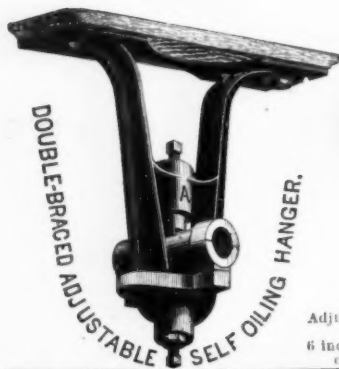
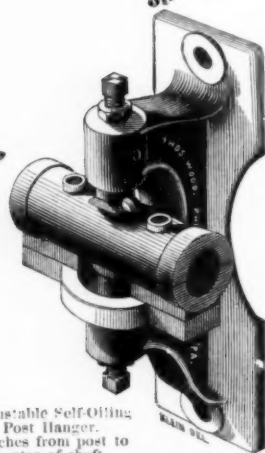
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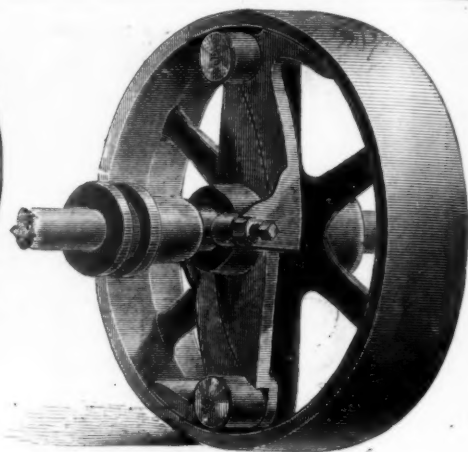
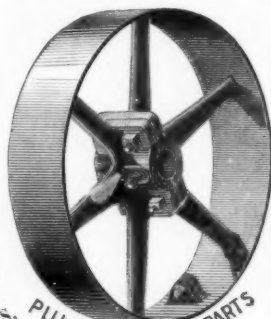


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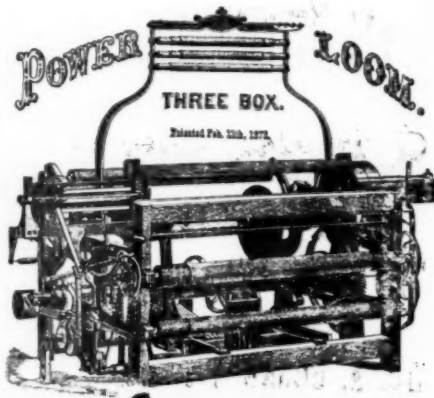
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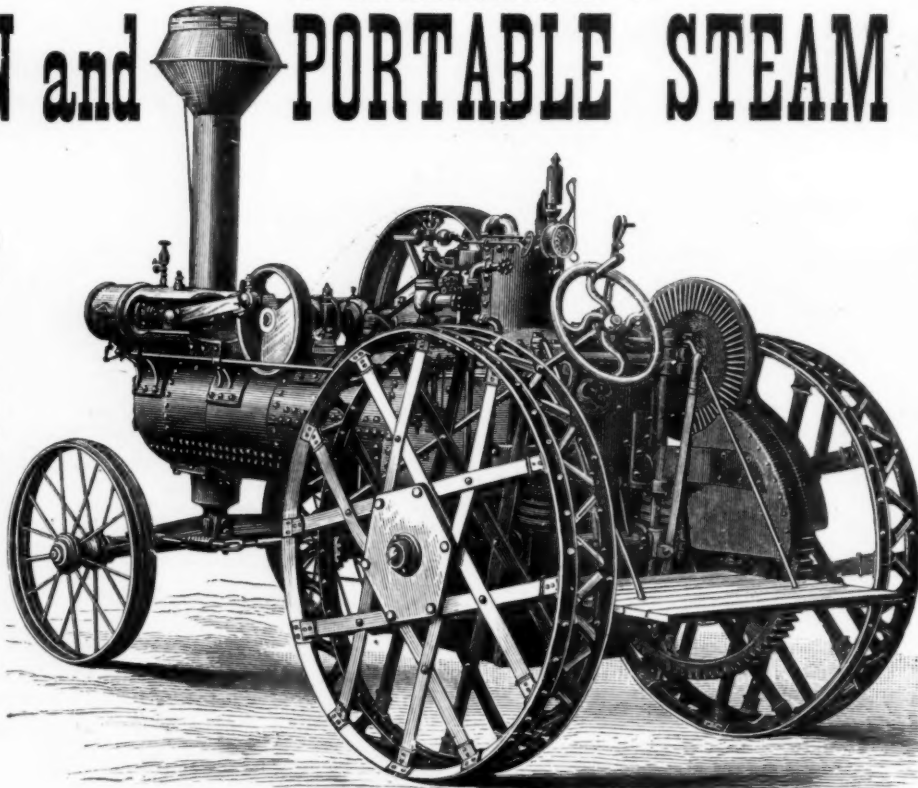
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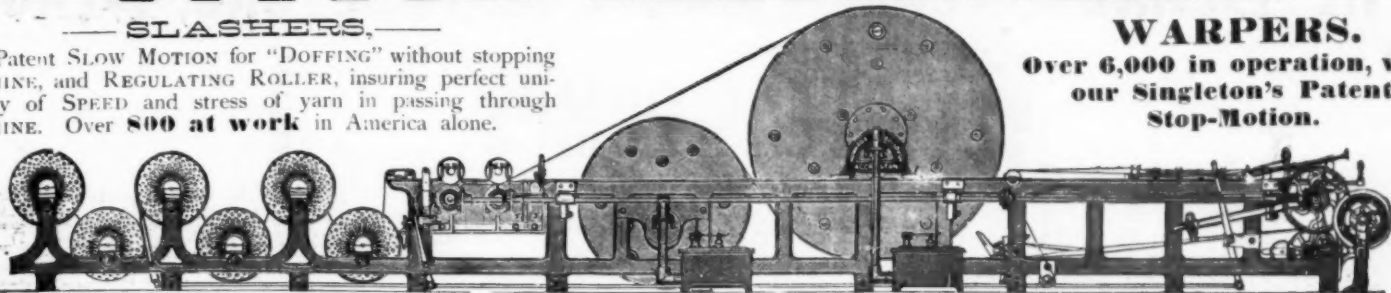
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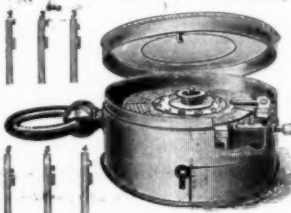
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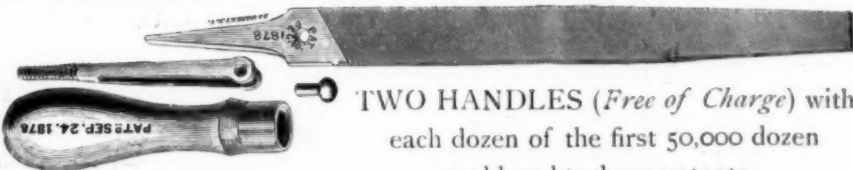
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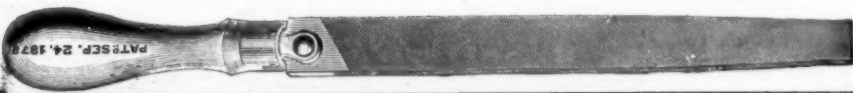
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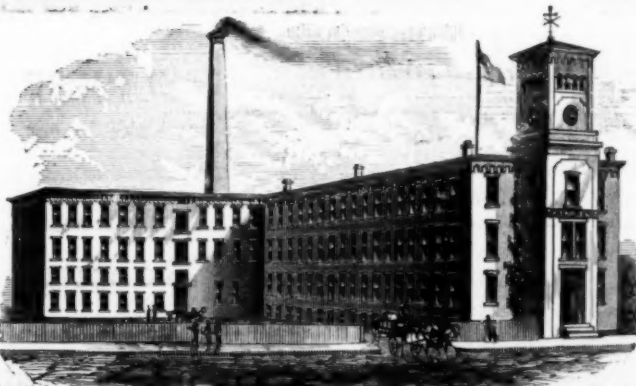
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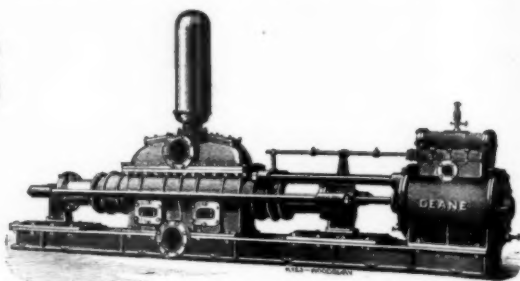
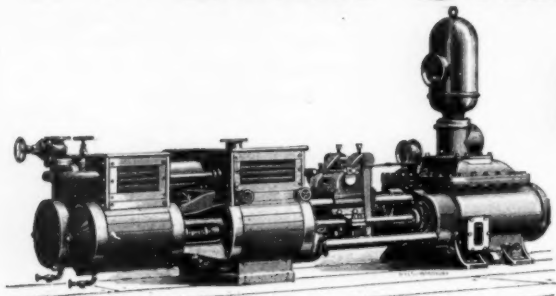
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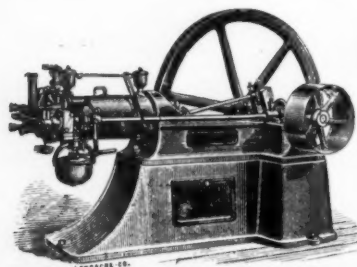
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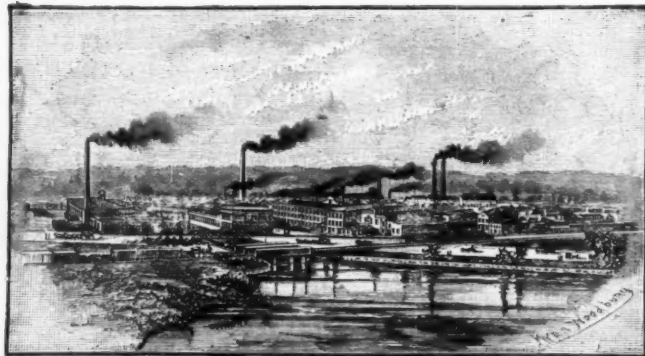
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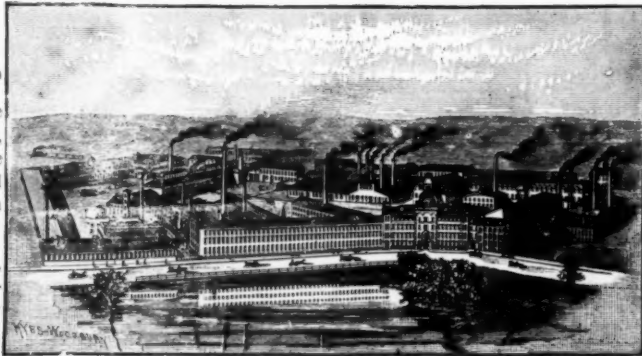
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CONSTRUCTION DEPARTMENT.

We publish, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

R. H. T. ADAMS, of Lynchburg, will build a large tobacco factory at Danville, Va.

Two furnaces are to be built at the new town of Sheffield—one by Gen. Thomas and one by Hill & Ensley. Wray & Co., of Nashville, will erect very large grain elevator; other manufactures will follow.

THE Columbus (Ga.) Female College will not be rebuilt.

B. L. Dyer and others, of La Fayette, Ala., will erect a college building at that place, and invite proposals.

B. G. Easton, of Detroit, is in Selma, Ala., to start a branch factory.

INCORPORATED in Maryland—Hagerstown and State Line Railroad, to be a branch of Western Maryland Railroad, Mr. John M. Hood, of Baltimore, being interested.

SEWARD & MUNT have erected a very large truck factory at Petersburg, Va.

MEYER & MULLER will construct wharf and warehouse at Jacksonville, Fla.

WALTER GORDON has put 500 men at work at Sheffield, near Tuscumbia, Ala., grading for railroad.

MR. A. D. MILLS, of Oxford, Mich., will soon leave there, and, in connection with J. C. Proctor, commence erection of extensive planing mill at Montgomery, Ala., previously mentioned.

THE Columbus Meat and Ice Company, of Columbus, Texas, with a capital of \$250,000, are erecting an immense building for refrigerating meats and making ice. Building alone will cost over \$100,000.

EIGHT large warehouses to be erected at New Orleans, by James Freret.

D. D. PEDEN and others, of Griffin, Ga., are working up the fruit evaporator company previously mentioned.

GRIFFIN, GA., Cotton Manufacturing Co. are buying their outfit of machinery.

A LEAD mining company is organizing in Birmingham, Ala.

A METHODIST Church will be erected in Rome, Ga.

CHARTERED—Fort Worth, (Texas,) Corsicana & Sabine Pass Railway.

TRACK-LAYING resumed on the Louisville, New Orleans & Texas Railroad, at a point 60 miles south of Memphis.

E. B. ROSS has established a tobacco factory at Rossview, Tenn.

INCORPORATED in Jackson, Miss., the Delta Jute and Fibre Manufacturing Co.

A TRAM ROAD is to be built between Scranton and Hymansville, S. C. W. R. Singletay, secretary.

THE Fort Worth (Texas) Woolen Mill Company, previously mentioned, have a capital of \$250,000.

THE Charleston Furniture Company, Charleston, W. Va., are putting in new machinery.

A COTTON factory is being organized in Durham, N. C.

THE Watts Coal, Coke and Iron Co., of Alabama, the charter of which was previously mentioned, own 12,000 acres of land on which they will operate.

JOHN C. ANGIER, of Durham, N. C., president of the new woolen mills previously mentioned, is now buying machinery.

T. S. CHRISTIAN and others, of Durham, N. C., will establish a large sash, door and blind factory.

W. F. ALEXANDER, chairman of Committee on Water Supply, Jackson, Tenn., invites proposals to March 29 for furnishing materials and constructing water works. About 50,000 feet of pipe, from 4 to 16 inches, 20 tons of castings, pumping engine, steam pump, two tubular boilers, engine house, &c., will be required.

MESSRS. HAY & MELLETE, of Winamac, Ind., are looking for a site for woolen factory in Tuscaloosa, Ala.

STONE, ALDRICH & MARTIN are building a large saw mill at Claremont, Va.

MESSRS. Morgan & Woolfolk, of Birmingham, talk of erecting a cotton compress.

A BRUSH Electric Light Co. will probably be organized in Birmingham.

A LARGE tannery will be located near the stock yards, Roanoke, Va., and a boot and shoe factory will probably follow. Roanoke Machine Works Co. can give particulars.

A LARGE university building has just been commenced at Chattanooga.—Dr. R. S. Rust being secretary board of trustees.

THE Eagle & Phoenix Manufacturing Co., of Columbus, Ga., will probably erect an additional cotton mill.

THE Florence Flour Mill, Florence, Ala., is to be enlarged, and a hub and spoke factory added to it.

A STREET car company has been organized in Macon, Ga.

TRACK-LAYING will be commenced at once on the Kentucky Central.

THE Woodstock Iron Co., of Anniston, Ala., will soon erect two additional coke furnaces, besides doubling the capacity of No. 2 as previously reported. Messrs. Tyler & Noble will build a hundred or more dwellings; Mr. Foster will build a planing mill; Mr. Harrison a planing mill; Mr. Brady an ice factory; while a large number of stores, warehouses and dwellings will soon be commenced. Further information about these projects can be obtained from Major Edward Hull, Anniston, Ala.

THE Anniston, Ala., Cotton Factory are reported as preparing to build another mill of about 25,000 spindles.

ANNISTON, ALA., Quarrying Co., (secretary, O. E. Smith,) has been organized.

THE National Refrigerating and Construction Company, of Washington, D. C., will establish an ice factory in Lynchburg, and probably in all the principal cities of Virginia.

PIKE county, Ky., will build a courthouse.

H. G. MEAD & Co., of Knoxville, Tenn., will build a large warehouse.

CHEROKEE IRON Co., at Cedartown, Ga., will change their furnace so as to make iron with coke.

A STOVE foundry and ice factory are rumored for Birmingham, Ala.

TRACK-LAYING will commence on East & West Railway of Alabama early in March. The line from Broken Arrow to Birmingham will soon be located.

REPORTED that a union depot will be built in Birmingham, Ala.

J. W. L. ARTHUR, of Tryon city, N. C., will start a broom factory at Greenville, S. C.

MAJ. WHINNERY, engineer of the N. O. & N. E. R. R., is superintending the preliminary work at Meridian, Miss., for the construction of immense machine shops for the road there. Work on foundations commenced. About 500 hands to be employed.

THE Kinnebrew Flour Mill will be built at Brownwood, Texas.

W. H. WRIGHT & Co., of Shelbyville, Tenn., have bought Wallis flour mill, at that place, and will develop it.

R. F. WALLIS & Co., of Shelbyville, Tenn., will build a plow factory there.

EL PASO, TEXAS, is to have gas and water works.

THE new cotton-mill company, of Dalton, Ga., has been fully organized, with J. K. Brunner secretary and treasurer, as previously stated.

ORGANIZED by W. T. Sylvester, of Jacksonville, Fla., and others, the Macon, St. John & Gulf Railroad, capital stock \$2,000,000, to build a railroad from Macon to some point in Florida.

CRUDUP & TABLE have taken part contract to build railroad from Sheffield, Ala., the new town, two miles from Tuscumbia, Alabama.

COL. PORTER KING and others, of Birmingham, Ala., have formed a company and will open a new coal mine at Coalburg.

CRICHTON & MCINTIRE, of Beaumont, Texas, will construct a machine for the Beaumont Ice Factory.

THE Marshall (Texas) Car Wheel Foundry, lately bought by Texas & Pacific Railroad, as previously stated, will be much enlarged.

GREENVILLE, Tenn., is to have a woolen mill.

It is reported that C. A. Hege, of the Salem, N. C., Iron Works, will remove to Palatka, Fla.

A UNION DEPOT is to be built at Lynchburg, Va., by the Norfolk & Western and other railroads.

A NEW industrial town is to be built up at Martin's Station, Va., on the Norfolk & Western Railroad. Name will be Pulaski.

INCORPORATED in Baltimore—The Cable Motor and Construction Company—capital stock \$250,000—for the construction of cable railways. John S. Gilman, Chas. Reuter and others, incorporators.

THE Columbia, Tenn., cotton factory, previously reported, will be built at once. Capital, \$175,000. W. C. Jones, care Manufacturers' and Immigration Association, Columbia, Tenn., manager.

INCORPORATED in Baltimore—Rialto Guano Co., capital stock \$150,000, to manufacture fertilizers. L. Seldner and others, incorporators.

THE Baton Rouge, La., Central Sugar Works and Refinery, previously rumored, will be established. Nearly \$100,000 already raised. Particulars from Mr. Wm. Garig, Baton Rouge.

MR. JONES will build a wooden bowl factory at Dyersburg, Tenn.

MESSRS. CARPENTER, ELY & Co., Plaquemine, Ala., saw and shingle mill, will increase machinery.

ORGANIZED at Fairmont, W. Va.,—the Fairmont, Morgantown & Pittsburgh Railroad, by W. M. Clements and others. Work to be commenced at once.

HARRIS BROS. of Pinson, Tenn., will build a flour mill.

THE Clarksville, Tenn., Water Works Company are increasing their machinery.

THE grain elevator previously reported to be built at Lambert's Point, Va., by Reynolds & Co., of Norfolk, Va., for the Norfolk & Western Railroad, will have capacity for 300,000 bushels.

HAYMAN & Co., flour mill, Lexington, Ky., will put in new machinery.

THE San Diego Mining and Smelting Co., previously reported, has organized at Maysville, Ky., to operate in Republic of Mexico.

THE \$100,000 sugar factory in Nashville will be built by Smith, Gifford & Co. and others,—previously reported.

W. T. BUCKNER & SOX, carriage builders, Charleston, Mo., will remove to Union City, Tenn.

C. C. HAGEMEYER & Co., Butler, Ky., are building a saw mill.

BURNED.

SAW mill of B. R. Jackson, on Mobile & Ohio Railroad, 23 miles from Mobile.

MILL house and machinery on Rimer gold mine, near Salisbury, N. C.; loss \$30,000.

GRIST mill and gin of Bunk Peck, Hatchechubbee, Ga.

McFERRIN & BIRB's saw and grist mill at Center, District No. 12, Tenn.

THE Rockland Bleaching and Dye Works, at Rockland, Baltimore county, Md. Loss \$25,000.

A Rapidly Improving Town.

Columbia, Tenn., and Its New Industries.

[Special Correspondence BALTIMORE MANUFACTURERS' RECORD.]

COLUMBIA, TENN., February 6, 1884.

It is now settled that Columbia is to have a cotton factory costing \$175,000. Recently Mr. W. C. Jones, of Laurel Hill Factory, made a proposition to the Manufacturers and Immigration Association of this city to build a cotton factory in this city, with stock amounting to \$100,000; then issue bonds for \$75,000, making total cost of \$175,000. Mr. Jones offered to take \$50,000. That association appointed a committee, composed of James P. Street, T. B. Rains, J. M. Mays, G. L. Thomas and G. T. Hughes, to raise the balance of the stock. This committee commenced yesterday morning to raise the remaining \$50,000, and before noon to-day all of said stock had been taken. A charter will be applied for at once, and Columbia will have soon a cotton factory.

Steps are also being taken to establish a sash, door and blind factory in this city, with a capital stock of \$50,000; and those who have the matter in charge say that this factory will certainly be built.

Columbia is already on a boom, and increasing rapidly; but the establishment of these factories will increase the boom, and make it one of the manufacturing cities of the South. The statistics show that more mules are sold in this county than in any other in the United States. This is indeed a stock county, with fine lands, and the third county in the State, Columbia being its county-seat. With such a rich county, and manufacturing establishments of such importance, there is no reason why Columbia should not become an important manufacturing city.

COLUMBIA.

ADVERTISERS wishing to reach the manufacturers of all classes, mining companies, steel, iron and hardware dealers of the entire South, cannot find a better medium than the BALTIMORE MANUFACTURERS' RECORD. We are always prepared to furnish proof of our claims as to circulation.

Howard & Bullough's Self-Stopping Warping or Beaming Machine.

The first self-stopping beaming machine that ever gained any practical success was one which Howard & Bullough succeeded in making after many years of trial, and which was exhibited at the Paris Exposition in 1867. There were, however, three defects which Messrs. Howard & Bullough say that all their efforts, as well as those of others, failed to remove, until the roller or Singleton machine was produced. These defects were:

1. The slowness in action of all oscillating bars. 2. The liability to stop when the thread was not absolutely broken, but when, on account of the overrun of a bobbin, the thread became slack. This is of constant occurrence when the machine is working, especially at a quick speed. 3. The liability of not stopping when a thread did break, owing to the accumulation of fibres on the top of the frame which holds the fallers. These fibres interlace and accumulate on this frame below the threads till the fallers are, so to speak, up to the neck in the floss, and, therefore, often fail to fall when a thread does break. This is a defect not likely to be seen in an exhibition, where machinery works under very favorable conditions and is kept very clean, but is a most serious one and a very obstinate one.

Singleton, instead of trying to improve the oscillating bar, as all others had been fruitlessly trying to do, dispensed with it altogether. He caused a pair of rollers to

time at which the faller begins to drop to severing the driving power from the machine. With the oscillating bar it is often 24 inches and 30 inches.

In all machines except the roller machine, the faller has a drop of only 5-16 to 7-16 of an inch. If therefore the bobbin overruns, the slackness of the thread may well allow the faller to drop that distance, and so be caught by the oscillating bar and the machine be stopped for nothing. If they stand out more than 7-16 of an inch they become unsteady, and the extra length makes them too heavy, hence they often stop for merely slack threads. In the roller machine the fallers are placed 3, 4 and 5 inches above the rollers, so that a thread cannot possibly become so slack as to allow the faller to descend so far. It must be broken if the faller can descend so far.

The advantages claimed for this machine are:

1st. The threads running in contact with the surface of the pin-holder, sweep away

is lost in getting to work again after a stoppage, and the present practice of drawing the thread through an eyelet by means of a reed hook is rendered unnecessary, and the time of doing so saved.

5th. There being nothing but the two rollers and their direct connection to the spring handle, in place of the oscillating bar, the trigger lever, the hook catch, the cam and cam lever of our machine, the improved machine is considerably simpler; there being fewer parts to adjust, it is less tedious to manage.

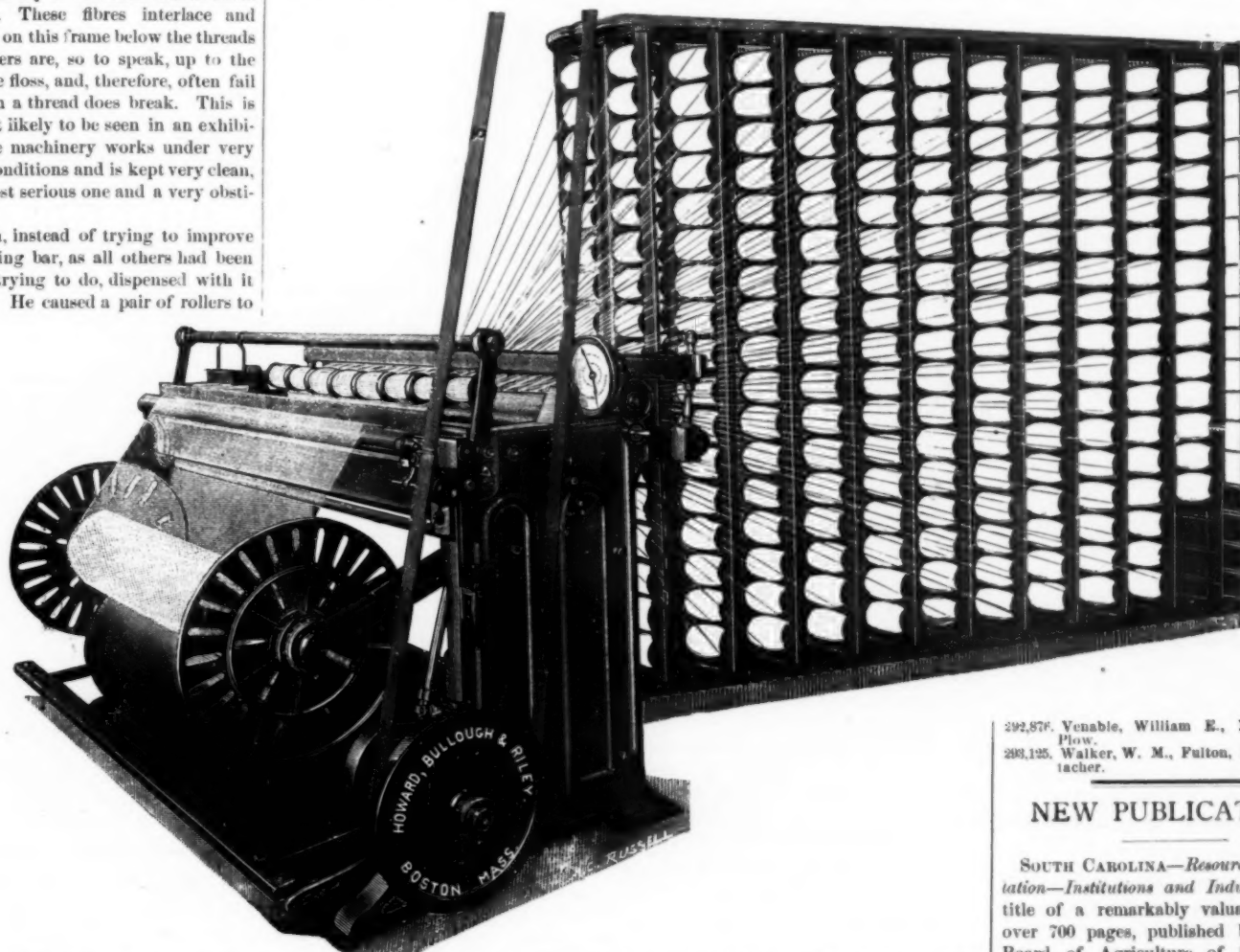
6th. A patent clutch box has been applied to this machine, whereby the rotating rollers are put out of gear when the machine stops, thus enabling the beam to be turned backwards or forwards easily.

Further particulars can be obtained from Messrs. Howard, Bullough & Riley, Boston, Mass.

List of Patents.

The following patents were granted to citizens of the Southern States, bearing date Feb. 5, 1864. Reported expressly for this paper by Louis Bagger

- 292,055. Mercer, W. H., Mercer, S. C. Stalk-chopper.
292,936. Moore, F. A., Louisville, Ky. Fruit-picker.
293,038. Moore, F. A., Louisville, Ky. Screw-clamp.
292,941. Nunnell, Dudley, Keene, Ky. Buggy-top.
293,070. Peacock, Geo., Selma, Ala. Lubricating device for wheels.
293,071. Peacock, Geo., Selma, Ala. Hub for car-wheels.
293,074. Pecor, A. C., Baltimore, Md. Refrigerating dish-cover.
293,075. Pfeiffer, Gus., Galveston, Texas. Cotton-marking brush.
293,080. Rankin and Knox, Grosbeck, Texas. Soil-pulverizer.
292,952. Robbarts, G. W., Elmo, Texas. Baling-press.
292,872. Royster, Wm. H., Midway, Va. Churn.
293,068. Simmons, C. H., Munford, Ala. Prather and cotton-opener.
292,869. Sinclair, James E., Baltimore, Md. Machine for washing, scouring and burling wool.
292,870. Stahlberg, Chas., Corsicana, Texas. Escapement for torsion pendulums.
293,301. Stewart, G. W., Atlanta, Ga. Car axle.



rotate in contact. The fallers were suspended on the threads above these rollers about 3 inches. The instant the faller dropped, through the breaking of a thread, it fell between the rotating rollers. These rotating inwards drew the faller betwixt them, and the front roller was pressed outwards, and this outward motion being multiplied by a lever caused the machine to stop. So little time it takes for the faller to drop the 3 inches, and so little time for the rollers to draw in this faller by a small fraction of their revolution, that from the time of the faller commencing its descent to the time at which the stop-motion has been acted upon, not more than a 1-12th part of a second has elapsed. This is a very great advantage over all oscillating bars. These may be receding when the faller is dropping. They must continue to recede until they are at the end of the back stroke. They must then advance to the faller before they begin to actuate the stop-motion. With the roller system, the yarn can only have travelled 2½ inches from the

HOWARD & BULLOUGH'S SELF-STOPPING BEAMING MACHINE.

the fibres as they fall, and allow no accumulation of "floss" to interfere with the dropping of the pins.

2d. The nip of the rollers being so far below the pins, there is no liability for the machine to stop on account of slack ends. The pin cannot fall so low unless the thread is absolutely broken.

3d. All the pins remaining in their ordinary working position above the roller when the machine stops, with the exception of the one which has fallen, and for the moment gone out of use, the warper may, after piecing the broken thread, set the machine on without hesitation, knowing that there is no fear of some of the pins remaining down to obstruct the starting of the machine.

4th. The machine being "set on again," the warper drops a pin on the thread last broken, to replace the one that has passed between the two rollers, and thus little time

& Co., mechanical experts and solicitors of patents, Washington, D. C.

- 293,131. Altmeyer, Jacob, Beawood, W. Va. Metallurgical furnace.
293,133. Bleike, W. T., Jr., Galveston, Tex. Poultry coop.
292,979. Broadbent, C. F., Baltimore, Md. Soap.
293,144. Bush, Thomas J., Lexington, Ky. Boring gage.
292,985. Caldwell, E. V., Harpersville, Ala. Harrow.
293,149. Crandell, J. H., Upper Marlborough, Md. Sewing-machine motor.
292,995. Davis, Riley L., Mooreville, N. C. Elevator.
293,001. Ferguson, L. D., Nashville, Tenn. Clay pulverizer.
293,022. Hiltner, Robt., New Orleans, La. Bending attachment for sewing machines.
293,029. Jackson, W. W., Bethany, La. Huller, cleaner and separator.
293,033. Johnson, C. C., Jackson, Miss. Coin-holder.
293,034. Johnston, L. F., Springdale, Ark. House-cleaning implement.
292,925. Lee, C. B., Galveston, Texas. Refrigerating machine.
293,183. Lookerman, F. S., Manokin, Md. Ripping attachment for scissors.

- 292,876. Venable, William E., Nicholson, Ga. Plow.
293,125. Walker, W. M., Fulton, Ky. Horse detacher.

NEW PUBLICATIONS.

SOUTH CAROLINA—Resources and Population—Institutions and Industries—is the title of a remarkably valuable book of over 700 pages, published by the State Board of Agriculture of South Carolina. This book has been prepared with a view of attracting immigration and capital to that State, but is far superior to the ordinary State immigration books, surpassing anything in that line that we have ever seen. It is a complete review of the resources of the entire State, with much information of value as to the soil, climate, productions, manufactures, &c., of every section of the State. This book is particularly valuable, especially at the present time, when the remarkable development of South Carolina is attracting such general attention. Information relating to it can be had from Mr. A. P. Butler, Commissioner of Agriculture, Columbia, S. C.

THAT "Model City of the South," Anniston, Ala., one of the wonders of the age in the matter of growth, has a paper known as the *Hot Blast*, that is about as enterprising and pushing as the city in which it is published. A live paper in a live town, it is a splendid exponent of the industrial life in Anniston.

The South and West.

A Comparative Test of Their Practical Capabilities and Advantages.

SOUTHERN OFFICE
BALTIMORE MANUFACTURERS' RECORD,
ATLANTA, GA., February 9, 1884.

A curious and interesting calculation has been recently made here, that has a startling significance in connection with an important and vast economic matter.

The problem demanding solution is the momentous one as to which affords the best field for immigration, the South or the West?

Which in the long run yields the best return to the average worker?

The case given may not be entitled to all that is claimed for it. There may have been outside considerations not properly estimated, or intrinsic personal qualities at work calculated in themselves to vary the result.

Be that as it may, I repeat that the instance, whether an unmeaning coincidence or not, is a case well worthy of an interested consideration.

There were five brothers in Craftsbury, Vermont, named Rawson. Two went to Iowa, two came to Georgia, and one remained at home. This was about fifty years ago. The three squads of youths were much the same sort of persons: steady, moral, intelligent, industrious, hard-working fellows, with pretty much the same economy, thrift and enterprise.

By a curious coincidence the Iowa couple and the Georgia couple finally located at the places that have become the seats of government of these States, Des Moines and Atlanta; they both also first settled in country places.

Now let us see the result: W. A. Rawson, the eldest, who came to Georgia, was worth \$600,000 in 1863. The war swept this away; he began again in 1865 and died a year or two ago, in 1879, worth \$300,000. Mr. E. E. Rawson, the other Georgian by adoption, is living and worth \$250,000 today.

The Iowa boys together have not realized as much as either of the Georgian men, while the Vermont youth who stayed at home on the family homestead has done less than any of the brothers.

We thus have Georgia, Iowa and Vermont in a square even-handed competition. The brothers have farmed, merchandised, and invested in real estate, giving a fair test of the three principal methods of making money. Mr. W. A. Rawson, the dead brother and wealthiest of the lot, manufactured some.

This is not a trial of a few years; it is an ordeal lasting half a century, and covering in that time a disastrous war that desolated Georgia, but did not hurt Iowa or Vermont.

The example is one that may be reasonably regarded as a typical one, and it may well be concluded that a hundred trials like this would eventuate in the same way. The men were alike, their qualities the same, their opportunities equal,—and the sole difference was in the advantages of their respective localities and the profit-bearing character of investments in each.

The elder brother, W. A. Rawson, kept accounts of his property all of his life. The exhibit of increase is very interesting. The first year he had \$416.68; the second year he added to it \$230; the 3d, \$442; the 5th he had \$9,105; the 15th, \$108,160; the 23d, \$213,053; in 1862, \$344,268; and 1863, \$600,000.

It is proper to state that none of these gentlemen have married fortunes or speculated. They have made their money in legitimate business, and by hard blows and steady energy.

It behooves those who are seeking new homes to consider well the philosophy of this very striking example of contrast in the remunerative result of investment and

labor in the North, the West, and the South.

Atlanta has definitely determined to make a display at the New Orleans Exposition. Major Baena, the president of the Globe Cotton Planter Co., has undertaken the agency of the representation. He has secured some 40,000 feet of area, and has the pledge of fully 30 leading manufacturers and business houses to take space and make exhibits.

Atlanta has, through her city council, determined to do \$150,000 of street paving. She did this amount last year, and a large number of the property-holders resisted their assessment of taxes to pay for the paving. The Supreme Court recently decided the question in favor of the city, and against the property-owners, and the result has been that the city authorities will now continue the necessary street improvement.

We are having much building done in Atlanta. The Kimball House is being reconstructed at a cost of \$400,000. A Chamber of Commerce is commenced that will take \$40,000. The Gate City National Bank is just finished at an expense of \$120,000. Major Fitten has erected a handsome building worth \$75,000. A court house has been recently completed, valued at \$140,000. The State capital, to cost a million, is at its inception. A park of 100 acres was given to the city by Col. L. P. Grant, and its improvement has begun under a Park Commission. The East Tennessee, Virginia & Georgia Railroad has established its shops here, expending \$200,000. The Constitution newspaper is putting up a new structure worth \$50,000, and has ordered a press worth \$27,000. Hundreds of elegant residences are being built. Year before last 1,600 new structures were put up; last year there were fully 1,800 new buildings, and this year has begun, despite the bad weather, at a rate that bids fair to double on last year.

[Since this was written, two large real estate sales have been made in Atlanta: one to Messrs. Rosenthal & Fox, of Baltimore, for \$75,000, and one to Mr. Geo. Cook for \$112,000, besides several smaller ones. Messrs. Rosenthal & Fox will expend about \$400,000 in erecting dwelling houses on their property, and Mr. Cook will also improve his.—*Editor MANUFACTURERS' RECORD.*]

The completion of the Georgia Pacific Railroad, opening up to the city an air line connection with the inexhaustible coal and iron quarries of Alabama, will give Atlanta a commercial feeder of colossal proportions.

I. W. AVERY.

An Interesting Feature of Southern Progress.

The Building of New Towns.

One of the most interesting features of Southern progress is the remarkable rapidity with which new towns spring up and grow into thriving cities, rivaling in their development the most noted examples of Western progress. In all parts of the South there are many villages rapidly assuming the importance of towns, and towns that are, with equal rapidity, becoming the centres of vast manufacturing interests, and steadily increasing in wealth and population. In every State, from Virginia to Texas, these can be found, and their number is surprisingly large. But it is more especially of the new places that spring into existence without passing through the usual course of a gradual increase from a village on up that we wish to speak just now.

A few years ago the place where Birmingham, Ala., now stands was a wilderness, with no indications pointing to the life and activity that now surges through that remarkable city. A stock company purchased the land and prepared to build up a new city. For a while these efforts

were successful, but the South was not then quite ready for a movement of that kind, and it soon looked as though Birmingham was doomed to premature decay. Not so, however. The wonderful mineral resources of the surrounding country became better understood, and as one furnace after another was built to utilize these vast supplies of coal and iron, Birmingham was quickened into new life. And now for five or six years there has been such substantial, rapid progress in that city as has rarely, if ever, been surpassed. Vast manufacturing and mercantile establishments, employing millions of dollars of capital, are now located there, and scarcely a day passes that some new industry or new business house on a large scale is not established there. The hotels are constantly crowded with strangers, not looking for salaried positions, but prospecting with a view of locating new enterprises.

The land company that originally owned the site of Birmingham, and which still owns large interests there, has paid enormous dividends, running last year to one hundred per cent. in cash, while still better dividends are anticipated for 1884. And yet the president, in his annual report a few days ago, stated that, owing to the advance in real estate in Birmingham within the last few years, the actual value of the company's property was now worth more than ever before, despite the large sales of real estate from year to year. As their property decreases in amount it increases in value,—the gain in the last four years, as shown by the average price received during each of those years for land sold being, if we remember aright, over 400 per cent. A concern that can pay 100 per cent. cash dividends annually, and at the same time quadruple the value of their property in four years, is undoubtedly an excellent institution in which to own stock. We have not seen lately any estimate as to the population of Birmingham, but some time since it was estimated by one of the local papers at about 15,000 or 16,000.

A little over two years ago Big Lick, Va., now Roanoke, was a small place, having only a few hundred inhabitants, and apparently having no particularly interesting future. But the owners of the Shenandoah Railroad, which was then being built down the Virginia Valley, decided to connect with the Norfolk & Western Railroad at Big Lick, and a company was organized to buy up a large amount of land adjoining the town. This was done, and then they went to work to build up the town. The success that has crowned their efforts may be judged from the fact that Roanoke now has about 7,000 inhabitants, while the number is rapidly increasing.

The Roanoke machine shops, a vast enterprise backed by the railroads uniting there, started up some months ago with several hundred hands, but will probably soon give employment to about 1,000 men. The Crozier Steel & Iron Works have in operation one of the finest furnaces in the South, employing several hundred men, while other manufacturing establishments, some of which are of great extent, are counted by the dozen, and in addition to those already in operation many others are being organized, among them a large agricultural machinery manufacturing company, a \$300,000 cotton mill, an extensive steam tannery, a rolling mill, a nail factory, and others. Progress is the order of the day in Roanoke, and a visitor from there says that the number of men constantly arriving and looking around for building lots for openings for new enterprises, &c., strongly reminds one of the rush to a new mining town, though the foundations of Roanoke's prosperity are much more solid and enduring than those built on a gold or silver mine, however prolific it may be.

With increased transportation facilities, which it is almost sure to have in the not

CONFIDENTIAL CREDITS.

Ealy's "Blue Book," just published, contains the names, address, financial standing and paying qualities of over 150,000 dealers in Hardware, Iron, Metals, Machinery, Cutlery, Guns, Stoves, Brass Goods, Machinists, etc., in the United States and Canada.

This is a new list, having been carefully compiled within the past three months by over 20,000 Special Local Correspondents and Merchants in the Trade, at an Expenditure of Many Thousands of Dollars. It is as complete and reliable in every particular as any Reference Book for determining Credits can be made, and is much more convenient than a larger Agency book, as the "Blue Book" is Condensed, being confined exclusively to the above-mentioned lines of trade.

We have reliable and active local correspondents in every city, town and village in the United States and Canada, and can furnish subscribers with late and full written reports regarding the character, habits, ability and financial worth of their customers.

The "Blue Book" is published twice a year. Terms of subscription made known on application to either of our offices.

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79 Dearborn St.,
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ENGINES, BOILERS, &c. For Sale Low.

- 1 Porter Horizontal Engine, 50-H. P. New.
- 1 " " " 18-H. P. "
- 1 " Portable " 25-H. P. "
- 1 " " " 4-H. P. "
- 1 Birdsall Traction Engine, 10-H. P.
- 1 " Portable " 10-H. P. "
- 1 " " " 8-H. P. "
- 1 " Semi-Portable Engine, 8-H. P. New.
- 1 Wood, Tabor & Morse, 8-H. P. Second hand.
- 1 Curley Saw Mill, No. 2. New.
- 1 Novelty Saw Mill. New.

Also Engines, both Portable and Stationary, any size, or any size or description of Boilers. The Gardner 3-Cylinder Engines.

Snyder's Little Giant Engines and Boilers. Low Prices guaranteed. Send for Estimates, stating size wanted and purpose to be used for, to

WM. R. EMERSON,

6 and 8 North Liberty St.,

BALTIMORE.

THE PERFECT Towel Holder

is selling very fast in the East, and is meeting with well-merited success. This little article should be in every place where a towel is used, as it saves towels and at the same time saves trouble. We will send a sample with prices for 15 cts., or a sample dozen for \$1.00.

Hart & Co., Box 24,
HARTFORD, CONN.

SCALES,

Anvils, Vises, Portable Forges, Blacksmith's Tools, Hardware Specialties.
Send for Price-List.
Chicago Scale Co., CHICAGO.

If you are not already a subscriber to the Baltimore Manufacturers' Record, send us \$3 and you will receive it regularly for one year or six months for \$1.50.

very distant future, Roanoke bids fair to become one of the most important industrial centres of the South.

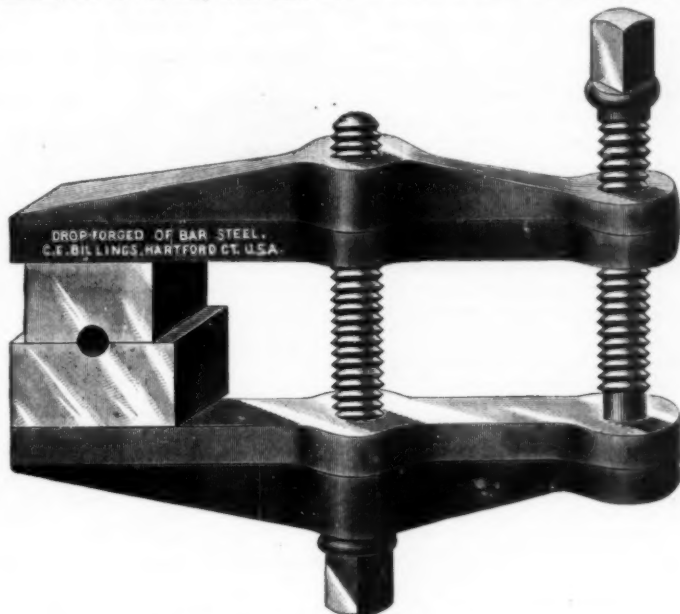
Virginia has also given birth to another enterprise of this kind in Newport News which promises to become as important a point for the shipping trade as Roanoke will be for manufacturing interests.—Through the energy of the Chesapeake & Ohio Railroad, Newport News has been changed within the last few years from a barren shore to a shipping point of great importance, where hundreds of vessels arrived in 1883, and from where thousands of barrels of flour and immense quantities of coal and timber were exported last year. One of the largest elevators in the country, with a capacity of 1,500,000 bushels of grain, has been constructed, and by the next harvest time Newport News will undoubtedly become an important grain port. The coal piers and steamship wharves have been constructed on a very substantial scale, and there is every indication that the coal trade of this young town will assume an importance quite surprising to those who have watched the growth of this new port, which is destined to cut largely into the trade of some of the older Atlantic ports.

Turning from Virginia back to Alabama again we find several other towns that well illustrate this new feature in Southern progress. Anniston, which has been called the "Model City of the South," is situated in one of the most desirable locations to be found in Alabama. A few years ago a firm composed, we believe, of only two partners, neither of which could be called rich, seeing the advantages of the locality, purchased a large tract of land, and determined to build a town here. The history of their efforts is peculiarly interesting and instructive, but it is not necessary to elaborate it now. A cotton factory and one or two other manufacturing enterprises were started as these gentlemen were able to do so, and the profits from these were mainly used in beautifying the new town, in laying out streets, building water-works and similar undertakings, the entire place being retained in the possession of the original owners, who also controlled all the business of the place. After the population had increased to about 3,500, the owners determined to throw the town open to the public, which was done less than a year ago. Since then Anniston has grown very rapidly, and new industries, great and small, have been added to her wealth and increased her population. The original projectors of this town have, of course, like those of Birmingham and Roanoke, reaped a rich harvest for their enterprise and work. The rush to this town at present is simply wonderful, and it is expected that by spring there will be fully 10,000 people in Anniston. Dwellings and stores by the hundred have been contracted for, and house-builders are taxed to their utmost to keep up with their orders. As stated elsewhere in this issue of the MANUFACTURERS' RECORD, a large number of extensive manufacturing establishments are also soon to be erected in Anniston, among them being two furnaces, a very large cotton mill and two planing mills.

Probably the most brilliant effort in the line of founding a new town that the South has yet seen is the new-born town of Sheffield, Ala. Only a few months ago we gave the particulars of a company organized by two of the Gordon brothers, of Georgia, with a capital of half a million subscribed by Southern men, for the purpose of building a city near Florence, Ala. The site selected was particularly favorable, the advantages for manufacturing probably not being surpassed by any location in the country, and added to the cheapness with which coal could be mined, and the cheapness with which pig iron could be made, the new city would have magnificent transportation facilities by

water, so that it is estimated that iron made in Sheffield can be shipped to consuming markets several dollars a ton cheaper than from any place in the South where iron is now produced. Almost before the arrangements for preliminary work were commenced, the new company received overtures from the Seney Syndicate of New York, which resulted in their purchase a couple of weeks ago of a half interest in Sheffield, and assured a brilliant future to the newest of Southern cities. We believe that the ground for a railroad to open up Sheffield to the outside world has been broken only a few weeks, and no town lots will be for sale for a couple of months, yet companies have been organized to establish some very extensive enterprises there, so extensive in fact that it is fully expected that Sheffield will have 5,000 inhabitants before 1884 is ended. As stated by us last week, arrangements have already been made for building two large furnaces, a very large elevator, extensive shops for the Memphis & Charleston Railroad, and other industrial enterprises. Again, in this instance, as in the others, a fortune has come to those who planned this great undertaking.

There are many other cities and towns in the South that are growing probably just as fast as Roanoke or Birmingham or Anniston, but it was only with such as



BILLINGS' DROP-FORGED MACHINISTS' CLAMP.

have been started by individual enterprise that we care to deal just now, as showing one of the most interesting phases of the development of the South.

Non-Conducting Glass Valve Wheels.

The attention of manufacturers of Radiator valves, gauge cocks, lubricators, water gauges, injectors and the great variety of steam goods that are usually fitted with wooden wheels, is invited to an Improved Non-Conducting Glass Wheel, made by Messrs. Pancast & Maule, 23 and 245 South Third street, Philadelphia. These wheels are made of black flint glass (although any desired color can be substituted,) and are thoroughly annealed, by which they gain sufficient strength to stand rough usage. Should they break off the mountings would not be injured; and as the latter are interchangeable, a new wheel can be put on with a common screw-driver in a few moments by any one.

When using valves fitted with glass wheels, the radiators may be erected in a new building and connected up, and when the entire work is done and ready to be turned over, the wheels can be put on all valves in a few moments, thus saving the work from being tampered with while in

progress, besides affording every facility for packing stuffing-boxes.

The advantages claimed for these wheels are: It is impossible to make them hot, and under any amount of steam they never become more than slightly warm to the touch, and can be handled freely without the possibility of burning the fingers.

The ordinary wooden wheel loses much of its non-conducting property by reason of the two large metal plates which are required to retain in its position the wooden rim, which latter must also, to gain the requisite strength, be made very thick and unsightly. These metal plates cover such a large surface that, in operating valves, the hand is frequently brought in contact with their surfaces when heated to a point many degrees above the comfortable one, and in every case the wheel is rendered inconveniently hot to handle.

The mountings of wooden wheels are very liable to become loose by reason of shrinkage of the wood, caused by alternate wetting and drying, resulting from leaky stuffing-boxes, and they are then easily split and twisted off. In the glass wheel a small washer on the under side and a single screw on top constitute a perfectly simple and secure attachment to the valve stem, both of which parts are so placed as to be out of reach when operating valve,

and the hand can only touch the cool surface of the glass, which material, being unaffected by heat or moisture, is exempt from the tendency to become loose—common to the ordinary wheel.

The wood wheel soon loses its polish, and becomes dingy and unsightly from wear and the accumulation of dust; whereas the glass one retains its bright and glistening surface indefinitely, and is as attractive after ten years' service as when first put on.

Billings' Drop-Forged Machinists' Clamp.

The accompanying illustration shows a style of clamp forged from bar steel. It is a very useful tool for the machinist and tool maker, and one which, as a general thing, they have always been obliged to make for themselves. The old way of making these clamps was by using straight square bars, of the desired length and size, drilling, tapping and putting in the screws. Necessarily there was a weak point, where the centre screw passed through the pieces, and they were very apt to break at that point. The designer of this clamp, as shown in the cut, claims nothing particularly new, except it being drop-forged and the stock distributed in a way to overcome the weak points named. The cost is very small. The Billings & Spencer Company, Hartford, Conn., are the manufacturers.

SHEET IRON ROOFING.

Northrop's Patent Cap Seam Iron Roofing.

No rivets, screws or nails through the sheets. Easily applied and perfectly watertight.

CRIMPED IRONS

of various styles for Roofing and Siding.

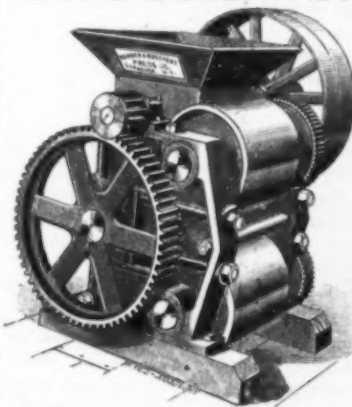
IRON CEILING.

ORNAMENTAL. DURABLE. FIRE-PROOF.

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97 First Avenue,
PITTSBURGH, PA.

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Presses, Heaters, Hullers, &c.

For Small or Medium-size

COTTON-SEED OIL MILLS.

Can furnish estimates for a complete mill or any part thereof. Also BALING PRESSES for Cotton, Woolen or Paper factories.

Lard, Tallow, Oleo and Paraffine Presses.

Correspondence solicited.

Boomer & Boschert Press Co., Syracuse, N. Y.
Or, 219 Fulton St., New York City.

E. J. CODD & CO.

Foundry, Machine and Boiler Works,

255 to 261 S. Caroline St., BALTIMORE.

—BUILDERS OF—

Stationary and Marine Boilers, Stills, Tanks, Agitators, Kettles, &c., Stationary and Marine Engines, Fertilizing Mills, Steam Dredges, &c. Prompt attention given to Steamship, Mill and other Repairs. Iron and Brass Castings made to order.

Derby Roll Top Desks.

—Best Office Desk in the World.—



Cherry, Walnut, Oak, Ash and Mahogany.

Send for Illustrated Catalogue.

Geo. H. Derby & Co.
55 Charlestown St., Boston, Mass.

PRINTERS' ROLLERS.

Composition, 35 cts. & 75 cts. No charge for casting. Orders by mail given prompt attention.

B. DIETZ, Cor. Light and Mercer Sts., Baltimore.

MANUFACTURING.

Subscribe to the *Baltimore Manufacturers' Record*. Price \$3 per year.

BALTIMORE.

THE Baltimore Belt Co., of which Messrs. Lindley & Sweet are the proprietors, report their business now opening up with numerous enquiries and orders. During 1883 their trade was very satisfactory. They have maintained the high standard in quality, finish, &c., of their well-known goods, formerly manufactured by Mr. J. H. Haskell, who, during a long business career, gained a very wide reputation for the products of the Baltimore Belt Co. They have quite a heavy local trade, and their Southern trade is greatly on the increase.

MESSRS. JAS. W. GEDDES & Co., metal and sheet-iron workers, North street, have just received a large contract for covering a new pier of the Northern Central Railroad Co., the sides to be covered with corrugated iron and the roof to be tinned, the dimensions of the pier being 500 feet long and 110 feet wide. This pier, when completed, is to be used for loading and unloading freight.

MESSRS. H. BALDERSTON & SON, South Calvert street, manufacturers of iron railings, etc., report business as very encouraging, having liberal orders on their books, with the outlook for future trade exceedingly gratifying.

All manufacturers and users of steam are anxious to curtail the expense of motive power as much as possible, and many devices have been contrived to accomplish this result. On account of these facts we invite attention to the advertisement in the *MANUFACTURERS' RECORD* of Mr. Geo. M. Lindsay, who has in successful operation a means of reducing this expense, by means of a patent pulley covering which he guarantees to save 60 per cent. of steam power. Some of the largest manufacturers have tested this, and, finding it to be as represented, have placed their orders with him. Among those who have done this we mention Messrs. Murrill & Keiser, C. A. Gambrill Manufacturing Co., A. Hoen & Co., Baltimore Car Wheel Co., and others. Further information regarding price, &c., can be obtained from the inventor, Mr. Geo. M. Lindsay, 95 Sharp street.

THE Moore Water Tube Boiler Works, N. Holliday street, report a very busy time. They have orders now received for 1,000 horse-power. They are to place in the warehouse of Messrs. R. Sauer & Co., (lately burned out,) a 30 horse-power Westinghouse Engine and a 40 horse-power Moore Water Tube Boiler; a 48 horse-power boiler for a firm in this city, and a 405 horse-power boiler for a firm in Philadelphia. During the last month they have had numerous enquiries which will probably result in more orders.

MESSRS. W. J. CLARK & BRO., pattern makers and hydrant manufacturers, N. Holliday street, report a briskness in both branches of their business. In the former, among one of the large contracts on hand, is a handsome and elaborate complete tugboat pattern for a high-pressure engine which is to be built by Messrs. Jno. C. Froehlich & Co. of this city. The pattern is very finely made. In their hydrant business orders are numerous.

IN GENERAL.

THE Texas Continental Meat Co., of Ft. Worth, Texas, have just finished their immense establishment, and commenced work, slaughtering and packing cattle and sheep. The plant cost \$125,000.

THE Knoxville (Tenn.) Car Company has closed a contract to furnish 6,000 wheels to the Pullman Car Co.

THE Bridesburg Manufacturing Co., of Philadelphia, have just put a new over-head traveling crane, made by the Yale & Towne Manufacturing Co., in their foundry, and find that it works in a very satisfactory manner. The Bridesburg Company are now filling liberal orders for machinery for Southern mills, among them being one for the complete outfit for the McAden Mill, at Lowell, N. C., which, when completed, will contain 300 looms. This mill will manufacture plaids. The Bridesburg Company have also received the entire order for the Porter Manufacturing Co., at Clarksville, Ga., a new woolen mill, managed by Col. J. W. Robertson, of Roswell, Ga. They are putting into this mill 48-inch cards, with iron cylinders, &c., the Bridesburg self-acting mules, 504 spindles each, 1 $\frac{1}{4}$ -inch gauge, and the Bridesburg clipper loom. They will manufacture jeans.

TEXAS is not a slow State. Austin and El Paso are now lighting by electricity. Brush got the dynamos and Westinghouse the engines.

THE Lechner Mfg. Co., Columbus, O., manufacturers of elevators, &c., and roller detachable chain belting, have received orders for another coal elevator from W. P. Rend & Co., Chicago, for their mine at McDonald, Pa.; also an order for coal elevators from the Great Western Mining and Mfg. Co., Peach Orchard, Ky. This company has also furnished Gay, Kimball & Gay, Rutland, Vt., and Danl. Shaw Lumber Co., Eau Claire, Wis., with detachable chains for various purposes.

MEYERS BROS. & Co., tobacco manufacturers, Richmond, Va., are putting in an Albro-Hindley screw elevator, with automatic hatch doors and pneumatic safety clutch, built by Clem & Moore, Philadelphia.

TATE & TROLLINGER, of Mebanesville N. C., are putting a 50-horse power Westinghouse automatic engine into their flour mills.

THE cotton factory at Birmingham is receiving its machinery.

ONE of the best hotels in the West is the Palace Hotel in Cincinnati. The building is a large, handsome stone structure, fronting on three streets. It is handsomely furnished, its clerks are polite and obliging, and everything conducive to the comfort of its guests is carefully attended to. Its rates are as low as at any other first-class hotel.

WHAT is poetical license may perhaps never be defined. The points of a perfect pen may, however, and Easterbrook's fill the bill.

ADVERTISERS wishing to reach the manufacturers of all classes, mining companies, steel, iron and hardware dealers of the entire South, cannot find a better medium than the *BALTIMORE MANUFACTURERS' RECORD*. We are always prepared to furnish proof of our claims as to circulation.

THE MARKETS.

OFFICE MANUFACTURERS' RECORD, }
BALTIMORE, February 13, 1884. }

The conditions of general trade show no change of any importance since our last issue, business continuing fairly satisfactory, with many indications of increased activity as the season advances. While there is over-production and depression in a few lines of manufactures, in other branches trade is reasonably good, and in some there is a marked activity. The Southern States appear to be enjoying a most remarkable degree of prosperity in industrial affairs, which is all the more noticeable when contrasted with what other sections are doing. Our list of new factories and mills published every week shows that many millions of dollars are being invested in industries of this kind at the South.

The local market for manufactured iron continues active, with liberal sales at our quotations, viz:

Ref. Bar Iron, 1 to 6x $\frac{1}{2}$ to 1.....	26@2 1-10c
" " " 1 to 4x $\frac{1}{2}$ to 1.....	26@2 1-10c
" " " 4 to 2, round and	"
" square.....	26@2 1-10c
Hoop Iron, 1 $\frac{1}{2}$ wide and upward	26@2 1-10c
Band Iron, from 1 $\frac{1}{2}$ to 6 in. wide	26@2 1-10c
Horseshoe Iron.....	3.2@ 3.3c
Norway Nail Rods.....	5.4@ 5.5c
Black Diamond Cast Steel.....	11 @ 12 c
Machinery Steel.....	4 $\frac{1}{2}$ @ 5 c
Spring Steel.....	4 @ 4 $\frac{1}{2}$ c
Common Horse Nails.....	10 @ 11 c
Railroad Spike, 5 $\frac{1}{2}$ x9-16.....	2.5@ 2.6c

For pig iron the enquiries have hardly been as numerous as during the preceding week, but this is doubtless only temporary. There is practically no change in the market, and we quote as before, viz:

Baltimore Charcoal Wheel Iron (all	
Baltimore ore).....	28 00@29 00
Virginia C. B. Charcoal Wheel Iron.....	28 00@—
Anthracite, No. 1.....	21 00@23 00
" " 2.....	20 00@21 00
" " 3.....	18 00@20 00
" Mottled and White.....	16 00@17 00

Roll, Sheet and Platers' Brass,
GERMAN SILVER,
COPPER, BRASS AND GERMAN SILVER WIRE,
BRASS and COPPER TUBING,
BATTERY and PLATERS' SILVER, &c.
PHILIP R. VOGEL, JR.
Manufacturers' Agent,
No. 79 German Street, Baltimore, Md.

GREAT SOUTHERN DESPATCH
FAST FREIGHT LINE BETWEEN
BALTIMORE AND THE SOUTH AND SOUTHWEST,
Via Western Maryland Railroad.
For Rates and other information apply to or address:
B. H. Griswold, A. Pope, Gen'l Agt., D. K. Hauck, Sol. Agt., J. H. Geigan & Co., Agts., D. H. Knipple,
G. F. A., W. and B. R., Balt., R. and B., Va., Baltimore St., 133 W. Baltimore St., Agt., Hillen St.



ESTABLISHED 1845.
The Oldest Saw Manufactory in the South.
TOLAND & SON, 85 N. Front St., Baltimore.

Particular attention paid to Large Circular Work. We warrant our Small Circular Saws to stand more strain, without buckling or cracking, than any other make. We make all kinds of Saws, — Ensilage, Feed, Meat Choppers, and other knives made to pattern, warranted equal to the Best forged Knives, and CHEAPER.
N. B. We make no charge for hammering any Large Circular Saw that we can't make "go."
—GIVE US A TRIAL.



JOHN R. EDWARDS,
Blank Book Manufacturer,
LITHOGRAPHER, PRINTER AND STATIONER,
2, 4, 6, 8, 10 and 12 North St. and 120 and 122 W. Baltimore St.
BALTIMORE, MD.

Specialty: Account Books to order for Manufacturing Establishments, Banks and Insurance Companies. Estimates Furnished.

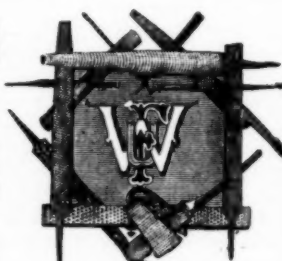
Union File Works
311 to 315 North St., Baltimore, Md.
MANUFACTURERS OF
FILES AND RASPS

Made from the Best Refined Cast Steel.

With all the requisite facilities to produce a first-class article, we are enabled to offer Files that will give entire satisfaction.

MORITZ & KEIDEL, Agents, 48 and 50 German St., Baltimore, Md.

GOVERNORS For Water Wheels Cohoes Iron Foundry & Mch. Co.
Send for Catalogue. Cohoes, N. Y.



PATENT ADJUSTABLE SOLDERING IRONS.



The only adjustable soldering-iron, combining perfect utility and simplicity of construction. Having no weak or complicated parts, it will outlast any other iron in the market. It has been subjected to the most severe tests, and in every case has given perfect satisfaction. From among the many favorable testimonials we have received, we publish the following:

The Covert Manufacturing Co., West Troy, N. Y.:

GENTLEMEN—I will state for your information that the Tinner's Soldering Tool, left at your request at this Arsenal last month for trial, has been thoroughly tested by the tinner employed here. It has been found superior to the soldering iron in common use, in that the copper tip is pivoted to the iron handle instead of being rigidly fastened thereto, and can be readily turned, so that it may form any angle with the handle that the workman may desire.

With the soldering tool in common use the change in relative position of tip and handle can be made only by heating and bending the handle. Respectfully, your obedient servant, A. MORDECAI, Lt. Col. of Ordnance, U. S. Army.

PATENT ADJUSTABLE COPPERS.

These coppers are designed and made expressly to be used in the construction of the Patent Adjustable Soldering Irons, described above. They are detachable and when worn out, or a change is necessary, they can be removed from the handle and another substituted. Although we illustrate but one style, we furnish to order all sizes and styles of coppers. For sale by all jobbers handling this class of goods, and the same discounts from the list given to the trade as when purchased direct from the factory.

COVERT MANUFACTURING CO.

SOLE MANUFACTURERS,

WEST TROY, N. Y.



F. C. NICODEMUS & CO. [LIMITED.]

Manufacturers of

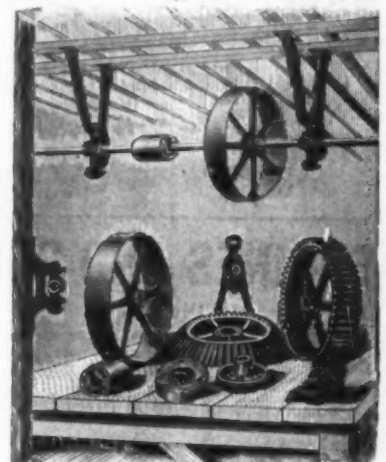
Stationary AND Marine Engines AND Boilers

Plate Iron and Machine Work of Every Description.

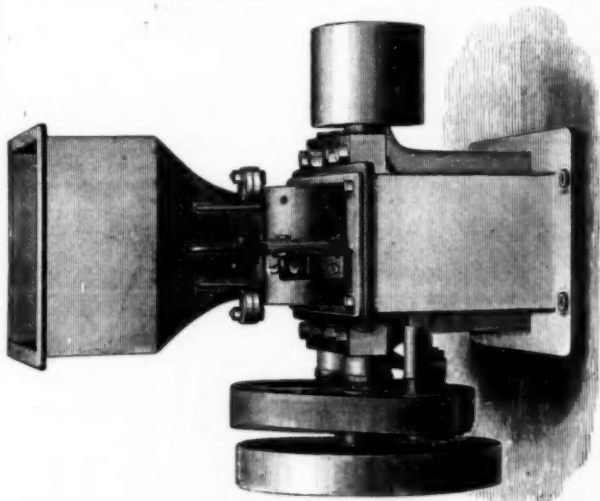
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Branch Office, 59 Exchange Place, BALTIMORE, MD.



Southern Agents for the Waters Patent Feed Water Heater for Steam Boilers; a saving of 20 to 30 per cent. guaranteed. Agents for "Success" Force and Suction Pump Co. Transmission Machinery a Specialty. Shafting, Pulleys, Hangers, &c.



NEWELL'S COTTON SEED HULLER.

(8-inch.)

WITH AUTOMATIC FEEDER, AND STAND OR FRAME.

PRICE, - - - \$75

CASH F. O. B. IN NEW YORK.

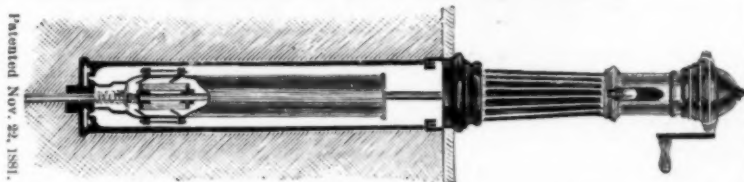
This style of Huller (without separator) is intended for use where it is not intended to remove the lint and hulls from the ground seed, or where parties have already a bolt or other form of separator to use with the Huller. This Huller is fitted with our new Automatic Feeder, and is equal in every respect to the hullers we furnish with separators.

It has been fully demonstrated that pulverized seed, hulls and all, are not inferior in fertilizing power to any of the commercial guanos; in fact, very few are found to be equal to it.

Forty to fifty bushels per hour can be hulled with two-horse power.

NEWELL UNIVERSAL MILL CO.

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W. J. CLARK & BRO., Manufacturers of Hydrants

No. 38 N. Holliday Street, BALTIMORE, MD.

These Hydrants are made of the best material, and are guaranteed to be entirely non-wasting and non-freezing. The works of these Hydrants can be taken out and repaired without breaking the ground. SEND FOR CIRCULAR.

JOSEPH B. MATTHEWS, 41 Centre Market Space, BALTIMORE, MD.

MANUFACTURER OF THE

MATTHEWS AUTOMATIC HIGH-SPEED ENGINE.

For Electric Lights and other purposes requiring steady, reliable power. The best and cheapest in the market. \$5 H. P. for \$500. SEND FOR CIRCULAR.

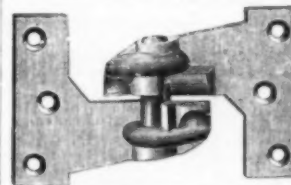
THE CLARK MFG. CO.

MANUFACTURERS OF

Builders' Hardware, Door Butts, Door Locks, DOOR KNOBS, (with Patented Improvements.)

Of Genuine Bronze and Other Finishes.

SHUTTER HINGES, GATE HINGES, PULLEYS, &c. BUFFALO, N. Y.



If You Want the Best STEAM PUMP

For Mining, Railroad or Steamboat use, Paper Mills, Chemical or Gas Works, Tannery, Brewery or Sugar Refinery, Draining Quarries, Cellars or Plantations, Irrigating or Hydraulic Mining, Sinking Foundations, Coffin Dam, Sewer, Well Sinking and other Contractors' Work, or Raising Water for any kind of Manufacturing or Fire Purpose, write for an illustrated descriptive book on the NEW PULSOMETER, containing greatly reduced prices, hundreds of testimonials etc. Mailed free. Prices 100 per cent. lower than other. Every pump tested before shipment and guaranteed as represented.

ECONOMY and EFFICIENCY UNEQUALLED.

Pulsometer Steam Pump Co., 83 John St., New York City, U. S. A.

See Prices next issue of this Paper.



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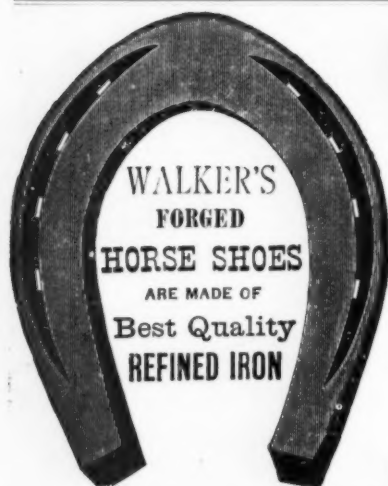
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American Screw Co.—Screws, Rivets, Bolts, etc.
Braunford Lock Works.
Boss Molasses Gates.
Carr & Crawley.—Shelf and Carriage Hardware.
Lancaster Bolt Co.—Eagle Carriage Bolts.
Lawson & Brenizer.—Hay and Manure Forks.
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Nicholson File Co.
Nauvauk Cutlery Co.

Clark Hardware Co.—Spring Butts, Screen Frames, etc.
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Walker's Horse and Mule Shoes.
International and Pimlico Brand of Horse Nails, Foreign and Domestic Hardware, Cutlery, Chains, Pistols, etc.



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Of Superior Shape and Finish.

CLEAN CREASE OF PROPER WIDTH AND DEPTH. Nail Holes Punched Through at Proper Angles.

Free from Burs. Outside Edges Smooth and Free from Bulges. Popular with all Shoers, as they are easily fitted. **EVERY SHOE WARRANTED.** ALSO,

MULE SHOES,

Of Superior Pattern, Quality and Shape. Sole Patentees and Manufacturers.

ENGINES AND BOILERS FOR POWER OF ANY CAPACITY A SPECIALTY.

"The Baxter."

2, 4, 6, 8 and 10 Horse-Power.

SAFE,
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Most
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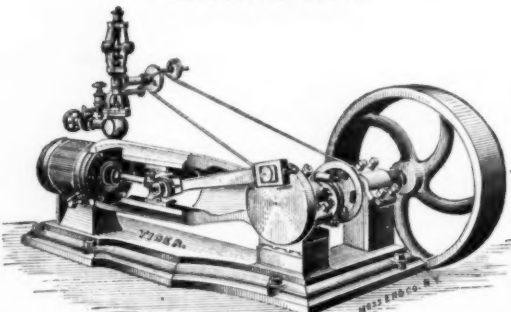


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COMPACT,
Simple and
STRONG.

ALL ON

One Bed Plate.



"THE TIGER ENGINE."

2 to 20 Horse-Power.

SEND FOR
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On Any of
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"The Sombart
Gas Engine."



No. 1—1 H. P.

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ESTABLISHED 1856.

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BLOOD'S AXES, IOWA BARB WIRE,
GAUTIER STEEL PLOW SHAPES, RODGERS & BRITTIN PLATED WARE.

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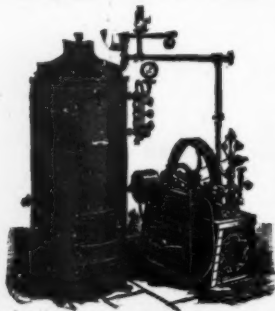
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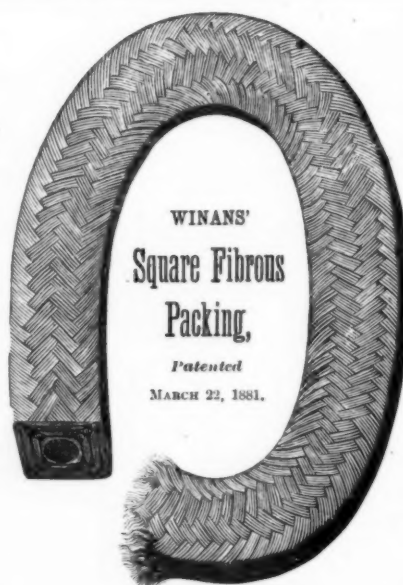
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HORIZONTAL

Engine & Boiler
Also, Yacht Engines.

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Winans' Packing Mfg. Co.
SOLE MANUFACTURERS.



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Samples and Circulars sent by mail on application.

PHOSPHOR-BRONZE



"Phosphor-Bronze."

The celebrated alloys in Wire, Rods, Sheets, Bolts, Wire Ropes, Wire Cloth, Castings, Ingots, etc. Pamphlets and particulars on application to
THE PHOSPHOR-BRONZE SMELTING CO., Limited,
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Owners of the U. S. Phosphor-Bronze Patents.
Sole Manufacturers of Phosphor-Bronze in the United States.

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Baltimore WHOLESALE Prices.

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Eagle and Vulcan..... 1 lb 10c, dis 30 s
Wright's..... 10 1/2 s
Armstrong's Mouse Hole..... 10 1/2 s
Trenton..... 10 1/2 s
Wilkinson's..... 10 1/2 s

ANVILS.

Conn. Valley Mfg. Co..... dis 60 s
Douglas Mfg. Co..... from list of
Ives..... Jan. 7, 1880.
Cook's Douglas Mfg. Co..... dis 40 1/2 s
Griswold..... dis 30 1/2 s
Patent Solid Head..... dis 25 s
Russell Jennings' Auger, Dowel, Machine-

Dowel and Hand Rail Bits..... dis 10 1/2 s 10 s
Ives' "Jennings" Bits..... dis 40 1/2 s 10 s
Expans. Bits, Clark's, small, 1/8; large, 3/16, dis 25 s
Expansive Bits, Ives'..... dis 30 1/2 s 33 1/2 s
Expansive Bits, Blake's..... dis 30, dis 40 s
Hollow Augers, Ives'..... dis 25 s
Hollow Augers, Douglas..... dis 25 s
Hol. Aug., Bonney's Adjust., 1/2 doz 1/8, dis 25 1/2 s
Hol. Aug., Stearns' Adjust., 1/2 doz 1/8, dis 25 1/2 s
Hol. Aug., Ives' Expansive, each 1/4, dis 30 1/2 s
Hol. Aug., Universal Expansive, each 1/4, dis 30 s
Wood's..... dis 25 s
Gimlet Bits..... dis 7 1/2 s gross, dis 30 s
Gimlet Bits, Diamond..... 1/2 doz 1 1/2, dis 40 s
Double Cut Gimlet Bits, Shephardson's..... dis 33 1/2 s
Double Cut Gimlet Bits, Douglas..... dis 33 1/2 s
Double Cut Gimlet Bits, Ives'..... dis 30 s
Morse's Bit Stock Drill..... dis 25 s
L. Hommedieu's Ship Augers..... dis 15 s

AWL HAFES.

Sewing Sewing Ferret..... dis 40 1/2 s
Patent Sewing, Short..... 1/2 doz 1/2 gross, dis 40 1/2 s
Patent Sewing, Long..... 1/2 doz 1/2 gross, dis 40 1/2 s
Patent Peg, Plain Top..... 1/2 doz 1/2 gross, dis 40 1/2 s
Patent Peg, Leather Top..... 1/2 doz 1/2 gross, dis 40 1/2 s

AWLS, BRAD SETS, &c.

Awls, Sewing, Common..... 75c. to \$1
Awls, Shouldered Peg..... 75c. to \$1
Awls, Patent Peg..... 50c. to \$1
Awls, Shouldered Brad, 1/2 gross \$2.70, dis 30 1/2 s
Awls, Handled Brad, 1/2 gross \$2.70, dis 30 1/2 s
Brad Sets, Aiken's..... 1/2 doz 1 1/2, dis 45 1/2 s
Brad Sets, No. 42, 10 1/2 s; No. 43, 12 1/2 s; dis 70 s
Brad Sets, Stanley's Exc., No. 1, 10 1/2 s; dis 70 s
Brad Sets, Stanley's Exc., No. 2, 14 1/2 s; dis 70 s
Brad Sets, Stanley's Exc., No. 3, 17 1/2 s; dis 70 s

AXES.

Lippenich or Mann's..... 1/2 doz 88 1/2 s net
Single Bit, 4 1/2 to 5 1/2 and over..... 1/2 doz 88 1/2 s net
Single Bit, beveled..... 50c. doz, advance
Double Bit, 4 1/2 to 5 1/2 and over..... 1/2 doz 116 1/2 s net
Double Bit, 4 1/2 to 6 and over..... 1/2 doz 117 1/2 s net
Double Bit, beveled..... 1/2 doz 155 s net

AXLES.

Sheldon & Co., Iron..... 55 s off
" " " steel..... 55 s off

AXLE GRASE.

Fraser's..... 1 lb. 6c.

BALANCES.

Spring Balances..... dis 25 1/2 s

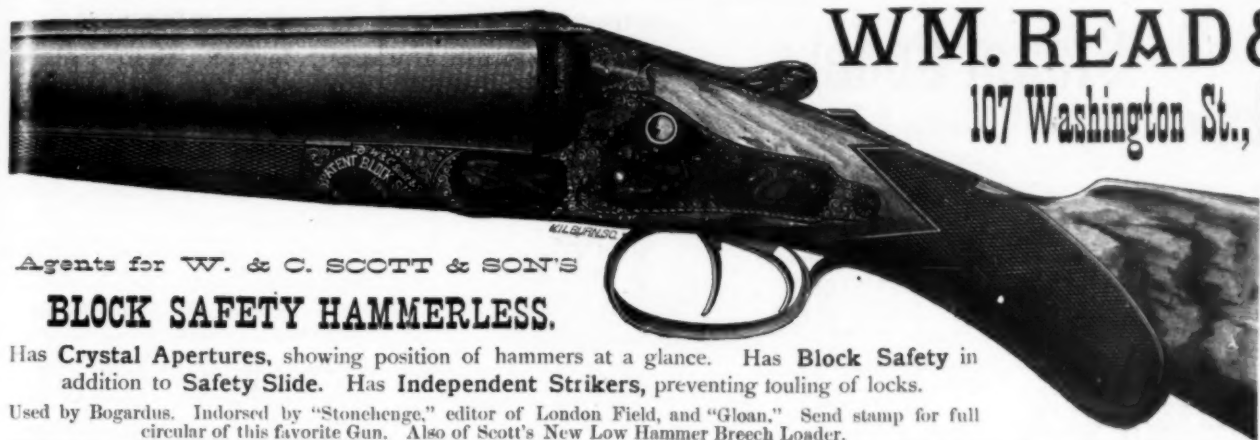
BELLS.

Hand, Light Brass..... dis 70 s
Hand, White Metal..... dis 90 s
Hand, Silver Chimney..... dis 25 1/2 s
Hand, Globe (Cone's Patent)..... dis 25 1/2 s
Gong, Abbe's..... dis 25 1/2 s
Gong, Yankee..... dis 30 1/2 s
Gong, Barton's..... dis 30 1/2 s
Leon Reading..... dis 25 1/2 s 10 1/2 s
Pul. Brook's..... dis 50 1/2 s
Crane, Taylor's..... dis 50 1/2 s
Lever, Sargent's..... dis 50 1/2 s
Bloomfield..... dis 20 s
Lever, R. & E. M. Co.'s..... dis 45 1/2 s 10 1/2 s
Call..... dis 25 s
Cow, Common Wrought..... dis 55 1/2 s
Cow, Western Sargent's List..... dis 55 1/2 s
Cow, Kentucky, Sargent's List..... dis 55 1/2 s
Cow, Moore's or Dodge's, Genuine Ky., new list
Nos. 1 1/2, 3 1/2, 5 1/2, 8 1/2, 10 1/2, 12 1/2, 15 1/2, 18 1/2, 21 1/2, 24 1/2, 27 1/2, 30 1/2, 33 1/2, 36 1/2, 39 1/2, 42 1/2, 45 1/2, 48 1/2, 51 1/2, 54 1/2, 57 1/2, 60 1/2, 63 1/2, 66 1/2, 69 1/2, 72 1/2, 75 1/2, 78 1/2, 81 1/2, 84 1/2, 87 1/2, 90 1/2, 93 1/2, 96 1/2, 99 1/2, 102 1/2, 105 1/2, 108 1/2, 111 1/2, 114 1/2, 117 1/2, 120 1/2, 123 1/2, 126 1/2, 129 1/2, 132 1/2, 135 1/2, 138 1/2, 141 1/2, 144 1/2, 147 1/2, 150 1/2, 153 1/2, 156 1/2, 159 1/2, 162 1/2, 165 1/2, 168 1/2, 171 1/2, 174 1/2, 177 1/2, 180 1/2, 183 1/2, 186 1/2, 189 1/2, 192 1/2, 195 1/2, 198 1/2, 201 1/2, 204 1/2, 207 1/2, 210 1/2, 213 1/2, 216 1/2, 219 1/2, 222 1/2, 225 1/2, 228 1/2, 231 1/2, 234 1/2, 237 1/2, 240 1/2, 243 1/2, 246 1/2, 249 1/2, 252 1/2, 255 1/2, 258 1/2, 261 1/2, 264 1/2, 267 1/2, 270 1/2, 273 1/2, 276 1/2, 279 1/2, 282 1/2, 285 1/2, 288 1/2, 291 1/2, 294 1/2, 297 1/2, 300 1/2, 303 1/2, 306 1/2, 309 1/2, 312 1/2, 315 1/2, 318 1/2, 321 1/2, 324 1/2, 327 1/2, 330 1/2, 333 1/2, 336 1/2, 339 1/2, 342 1/2, 345 1/2, 348 1/2, 351 1/2, 354 1/2, 357 1/2, 360 1/2, 363 1/2, 366 1/2, 369 1/2, 372 1/2, 375 1/2, 378 1/2, 381 1/2, 384 1/2, 387 1/2, 390 1/2, 393 1/2, 396 1/2, 399 1/2, 402 1/2, 405 1/2, 408 1/2, 411 1/2, 414 1/2, 417 1/2, 420 1/2, 423 1/2, 426 1/2, 429 1/2, 432 1/2, 435 1/2, 438 1/2, 441 1/2, 444 1/2, 447 1/2, 450 1/2, 453 1/2, 456 1/2, 459 1/2, 462 1/2, 465 1/2, 468 1/2, 471 1/2, 474 1/2, 477 1/2, 480 1/2, 483 1/2, 486 1/2, 489 1/2, 492 1/2, 495 1/2, 498 1/2, 501 1/2, 504 1/2, 507 1/2, 510 1/2, 513 1/2, 516 1/2, 519 1/2, 522 1/2, 525 1/2, 528 1/2, 531 1/2, 534 1/2, 537 1/2, 540 1/2, 543 1/2, 546 1/2, 549 1/2, 552 1/2, 555 1/2, 558 1/2, 561 1/2, 564 1/2, 567 1/2, 570 1/2, 573 1/2, 576 1/2, 579 1/2, 582 1/2, 585 1/2, 588 1/2, 591 1/2, 594 1/2, 597 1/2, 600 1/2, 603 1/2, 606 1/2, 609 1/2, 612 1/2, 615 1/2, 618 1/2, 621 1/2, 624 1/2, 627 1/2, 630 1/2, 633 1/2, 636 1/2, 639 1/2, 642 1/2, 645 1/2, 648 1/2, 651 1/2, 654 1/2, 657 1/2, 660 1/2, 663 1/2, 666 1/2, 669 1/2, 672 1/2, 675 1/2, 678 1/2, 681 1/2, 684 1/2, 687 1/2, 690 1/2, 693 1/2, 696 1/2, 699 1/2, 702 1/2, 705 1/2, 708 1/2, 711 1/2, 714 1/2, 717 1/2, 720 1/2, 723 1/2, 726 1/2, 729 1/2, 732 1/2, 735 1/2, 738 1/2, 741 1/2, 744 1/2, 747 1/2, 750 1/2, 753 1/2, 756 1/2, 759 1/2, 762 1/2, 765 1/2, 768 1/2, 771 1/2, 774 1/2, 777 1/2, 780 1/2, 783 1/2, 786 1/2, 789 1/2, 792 1/2, 795 1/2, 798 1/2, 801 1/2, 804 1/2, 807 1/2, 810 1/2, 813 1/2, 816 1/2, 819 1/2, 822 1/2, 825 1/2, 828 1/2, 831 1/2, 834 1/2, 837 1/2, 840 1/2, 843 1/2, 846 1/2, 849 1/2, 852 1/2, 855 1/2, 858 1/2, 861 1/2, 864 1/2, 867 1/2, 870 1/2, 873 1/2, 876 1/2, 879 1/2, 882 1/2, 885 1/2, 888 1/2, 891 1/2, 894 1/2, 897 1/2, 900 1/2, 903 1/2, 906 1/2, 909 1/2, 912 1/2, 915 1/2, 918 1/2, 921 1/2, 924 1/2, 927 1/2, 930 1/2, 933 1/2, 936 1/2, 939 1/2, 942 1/2, 945 1/2, 948 1/2, 951 1/2, 954 1/2, 957 1/2, 960 1/2, 963 1/2, 966 1/2, 969 1/2, 972 1/2, 975 1/2, 978 1/2, 981 1/2, 984 1/2, 987 1/2, 990 1/2, 993 1/2, 996 1/2, 999 1/2, 1002 1/2, 1005 1/2, 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3108 1/2, 3111 1/2, 3114 1/2, 3117 1/2, 3120 1/2, 3123 1/2, 3126 1

MOLASSES GATES.			
Stebbins Patterns.....	dis 70 & 10		
Stebbins Genuine.....	dis 67 1/2 & 10		
Stebbins Tinned Ends.....	dis 40 & 10		
Chase's Hard Metal.....	dis 50 & 10		
Self-Measuring (Enterprise).....	dis 30		
Lucola's Pattern.....	dis 60 & 10		
Wood's.....	dis 15		
Boss Nos. 1 2 3 4.....	dis 15		
Boss, Japanese Finish.....	dis 60 & 10		
Boss, Bronze Finish.....	dis 50 & 10		
NUTS AND WASHERS.			
Square Nuts.....	8 c off list		
Hexagon Nuts.....	8 1/2 c off list		
Washers.....	7 1/2 c off list		
ZINC AND TIN.			
Brass and Copper.....	dis 50		
Malleable (Hammer's).....	dis 50		
PINKING IRONS.....	dis 75c, net		
PLATING MACHINES.			
Astor Plating Machine.....	each \$15, dis 20		
Crown Plating Machine.....	dis 25		
6 in. each.....	dis 10 in. \$3 each.		
PLANES AND PLANE IRONS.			
Bench, First Quality.....	dis 20		
Bench, Second Quality.....	dis 25		
Molding.....	dis 15		
Bailey's (Stanley R. & L. Co.) new list, Jan. 1899.....	dis 20 & 10		
The Stanley (S. R. & L. Co.) new list, Jan. 1899.....	dis 20 & 10		
January 1899.....	dis 20 & 10		
Bailey's.....	dis 20 & 10		
Plane Irons, Butcher's.....	\$5.50 to 10		
Plane Irons, Auburn Tool Co.....	dis 20		
Plane Iron, Ohio Tool Co.....	dis 20		
Plane Irons, Sandusky Tool Co.....	dis 20		
PLIERS AND NIPPERS.			
Bull's Patent.....	dis 33 1/2		
Hall's Pat. Compound Lever Nippers.....	dis 25		
No. 2, 5 in. \$13.50; No. 4, 7 in. \$21	dis 25		
Gas Pliers.....	dis 50		
PLUMBS AND LEVELS.			
Diastion's.....	dis 40		
Stanley R. & L. Co.'s Pat. Adjustable.....	dis 65 & 10		
Stanley R. & L. Co.'s Non-Adjustable.....	dis 65 & 10		
Chapin's Patent Adjustable.....	dis 65 & 10		
Chapin's Non-Adjustable.....	dis 65 & 10		
Standard Rule Co.'s New Adjustable.....	dis 65 & 10		
Standard Rule Co.'s Non-Adjustable.....	dis 65 & 10		
Pocket Levels.....	dis 65 & 10		
RAIL.			
Sliding Door, Wrought Brass.....	dis 30		
Sliding Door, Bronze Wrt. Iron	dis 35		
Sliding Door, Iron, Painted.....	dis 10 & 10		
Barn Door.....	dis 10		
Per 100 feet.....	\$2.60 3/4 5.00 5.00 10		
B. D. for N. E. Hangers.....	Small Med. Large.		
Per 100 feet.....	\$3.10 2.70 .30 net		
RAZORS.			
J. R. Torrey Razor Co.....	dis 20		
RAZOR STROPS.			
Genuine Emerson.....	dis 60 & 10		
Budger's Emerson.....	dis 60 & 10		
Badger's (not Emerson).....	dis 30		
Imitation Emerson.....	dis 20		
Torrey's.....	dis 30		
RIVETS.			
Iron and Tinned, new list, Dec. 10, 1891.....	dis 45		
in bulk, new list, Dec. 10, 1891.....	dis 45		
Copper Rivets and Burrs.....	dis 45		
Nos. 7 8 9 10 11 12 13 14 15	dis 45		
Per lb. 49c 50c 52c 54c 56c 58c 60c 62c 70c			
RIVET SETS.....			
Stair, Brass.....	dis 25		
Stair, Black Walnut.....	dis 25		
RODS.			
Stair, Brass.....	dis 25		
Stair, Black Walnut.....	dis 25		
BOXWOOD. Ivory.			
Chapin's.....	dis 70 & 10		
Standard.....	dis 40 & 10		
Stanley.....	dis 40 & 10		
Stevens & Co.....	dis 70 & 10		
Stevens & Co. Miscellaneous.....	dis 50 & 10		
SAD IRONS.			
Self-Heating, Charcoal.....	dis 30		
Mrs. Pott's Irons.....	dis 35		
Enterprise Star Irons, new list, July 30, 1892.....	dis 35		
Comb'd Fluter and Sad Iron.....	dis 15		
Common Sad Irons.....	dis 15		
SAND PAPER.			
Baeder & Adamson's Flint, 000 1/2 \$4.50 per m.....			
Baeder & Adamson's Flint, 2, 2 1/2 & 3 500 per m.....			
Baeder & Adamson's Flint, Assorted 4.75 per m.....			
Baeder & Adamson's Emery.....	dis 30		
Baeder & Adamson's Emery per m \$6.50 to \$11.50			
J. Bartle's Sand, Flint and Emery Paper.....	dis 30		
SASH COILS.			
Common.....	dis 14c, net		
Silver Braided Lake Hemp.....	dis 17c, net		
Silver Braid, Lake White Cotton.....	dis 10c, net		
Silver Braided Lake Drab Cotton.....	dis 10c, net		
Silver Lake Cable Laid, Bengal unbleached	dis 10c, net		
Hemp, 17 cts.....	dis 10		
Russian Hemp, 19 cts.....	dis 10		
Italian Hemp, 34 cts.....	dis 10		
SASH WEIGHTS.			
Solid Eyes, in 500-lb. lots and over.....	dis 1 1/2 c, net		
SAUSAGE STUFFERS OR PILLERS.			
Miles.....	dis 25		
Perry.....	dis 25		
Enterprise Mfg Co.....	dis 25		
Monarch.....	dis 40		
SAWS.			
Boynton's Lightning Cross Cuts, new list, dis 40			
Boynton's Circular and Mill.....	dis 40		
Boynton's Ice.....	dis 25		
Boynton's Lightning Hand, Panel and Rip.....	dis 25		
Diastion's Circular.....	dis 40		
Diastion's Mill.....	dis 40		
Diastion's Cross Cut.....	dis 40		
Diastion's Hand, Panel, Rip, &c.....	dis 20		
Hubbard, Bakewell & Co. Cir. Saws.....	dis 40 & 10		
Hubbard, Bakewell & Co. Cross Cut.....	dis 30c, ft.		
Hubbard, Bakewell & Co. One-Man's, X Cut.....	dis 40 & 10		
Hubbard, Bakewell & Co. Mill Saws.....	dis 40 & 10		
Peace Circular and Mill.....	dis 40		
Peace Hand, Panel and Rip.....	dis 25		
Peace Cross Cuts.....	dis 35		
Peace Hand Saws, all widths.....	dis 10		
Webster Cross Cut, with Handles.....	dis 25 & 10 & 10		
Griffin's Hack Saws and Blades.....	dis 30		
SAW FRAMES.			
White.....	dis 10		
Saw Rods.....	dis 10		
SAW SETS.			
Stillman's Genuine.....	dis 10		
Stillman's Imitation.....	dis 10		
Common Lever.....	dis 10		
Leach's.....	dis 15		
Hammer, Hotchkiss.....	dis 10		
Aiken's Genuine.....	dis 10		
Aiken's Imitation.....	dis 10		
Diastion's.....	dis 20		
Morrill's.....	dis 10		
SCALES.			
Hatch, Counter, No. 171.....	dis 40		
Hatch, Tca, No. 161.....	dis 10		
Union Platform, Keystone.....	dis 45		

Chicago Scale Co.....	Special dis		
Forsyth Scale Co.....	dis 45		
Howe's.....	dis 20 & 10		
Chatillon's Grocers.....	dis 40		
Hamilton's Eureka.....	dis 25		
Family Universal.....	dis 30		
Family Favorite.....	dis 30		
Family Turnbull.....	dis 30		
Scale Beams, List of Jan. 12, 1892.....	dis 50		
SCRAPERS.			
Adjust. Box Scraper (S. R. & L. Co.).....	dis 50, dis 20 & 10		
Box, 1 Handle.....	dis 40, dis 10		
Box, 2 Handle.....	dis 40, dis 10		
Foot.....	dis 45 & 10		
Ship.....	dis 40, net		
Wilson Mfg Co.....	dis 40		
SCREW DRIVERS.			
Douglas Mfg Co.....	dis 20 & 10		
Diastion's.....	dis 40		
Cowles Mfg Co.....	dis 50 & 10		
Stanley Rule & Level Co.'s Var. Hds.....	dis 50 & 10		
Stanley Rule & Level Co.'s Bk' Hds.....	dis 40 & 10		
Hatchet.....	dis 30		
Clark's Patent.....	dis 25		
Shepardson.....	dis 25		
SCREWS.			
Flat H'd Iron, list Dec. 27, '89.....	dis 70		
Round Head Iron.....	dis 50		
Flat Head Brass.....	dis 15		
Flat Head Blued and Cut.....	dis 20		
Brass and Silver Capped.....	dis 40		
Japanese, list of Plain Screws.....	dis 30		
Coach, Patent Gimlet Point.....	dis 10		
Coach, Common or Lag.....	dis 10		
Bed.....	dis 10		
Machine, Flat Head, Iron.....	dis 55		
Machine, Round Head, Iron.....	dis 50		
Bench, Iron.....	dis 50		
Bench, Wood, Beech.....	dis 10		
Bench, Wood, Hickory.....	dis 10		
Hand, Wood.....	dis 20		
Hand, Rail, Sargent's.....	dis 60 & 10		
Hand, Rail, Hummer, Beckley & Co.'s.....	dis 40 & 10		
Hand, Rail, Am. Screw Co. list Jan. 1, '91.....	dis 70		
Jack (Wilson's).....	dis 25		
SCREEN FRAMES AND FIXTURES.			
Standard Window Screens No. 1, 1 doz.....	\$4; 2, \$5		
"Door" No. 5, 1 doz.....	\$15; 2, \$30		
"Window Corner Irons, No. 3, doz.....	\$15; 2, \$30		
"Door" No. 6, 1 doz.....	\$15; 2, \$30		
"Door Latches, 1 doz.....	\$15; 2, \$30		
Porter's Patent Window and Door Screen Frames.....	dis 25		
SHEARS AND SCISSORS.			
American (Cast) Iron.....	dis 70 & 10		
Pruning.....	dis 45 & 10		
Barnard's Lamp Trimmers.....	dis 40		
Tinner's.....	dis 15		
Corn Shears.....	dis 80		
Norfolk Shear Co.....	dis 75		
Jersey Shears.....	dis 80		
J. Wise & Son, Nickel, 30 & 35; Japanese, 60 & 65			
SHEAVES.			
Sliding Door, M. W. & Co. list.....	dis 45 & 10		
Sliding Door, R. & E. list.....	dis 60 & 10 & 2		
Sliding Door, Patent Roller.....	dis 60 & 10 & 2		
Sliding Door, Pt. Roller, Hatfield's.....	dis 60 & 10 & 2		
Sliding Door, Russell's Anti-Frict'n.....	dis 60 & 10 & 2		
SHOVELS AND SPADERS.			
Amer. New List, July 1, 1891.....	dis 15		
Griffiths.....	dis 30 & 10		
Remington's Lowman's Patent.....	dis 30		
Rowland's.....	dis 60		
Kimball's.....	dis 35		
Lippincott, new list.....	dis 20		
Hussey, Bliss & Co.....	dis 15		
SHUTTER HINGES.			
Clark's Improved Shutter Hinge, Nos. 0, 1, 1 1/2, 2, 2 1/2, 3.....	dis 75		
Iron and Brass Head, R. & E. list.....	dis 60 & 10 & 2		
Polished Steel, New List.....	dis 50 & 10 & 2		
SLEIGH BELLS.			
Arctic and Polar.....	dis 20		
Loose and neck and body strap.....	dis 50		
SPOKE TRIMMERS.			
Bonney's.....	dis 10		
Stearns.....	dis 20 & 10		
Ives.....	dis 55 & 10		
Douglas.....	dis 15		
SILVER-PLATED WARE.			
Wm. Rogers Manf. Co.....	dis 40, 10 & 5		
Holmes, Booth & Hayden.....	dis 40 & 10 & 5		
Brown Bros.....	dis 40 & 10 & 5		
Wallace's Steel Silver Plated.....	dis 30 & 10		
Rogers Bros 1847.....	dis 40 & 10		
C. Rogers & Bro.....	dis 40, 10 & 5		
SILVER PLATED HOLLOW WARE.			
Wm. Rogers Manf. Co.....	dis 40 & 10		
Meriden Britannia Co.....	dis 40		
SPOONS.			
Britannia.....	dis 60 & 10		
Tinned, Iron, Table and Tea.....	dis 65		
Tinned Iron Basting.....	dis 65		
German Silver.....	dis 35		
STONE.			
Hindustan No. 1, 5c; Axc, 8c.....	dis 35 & 10		
Steel Stone.....	dis 35 & 10		
Washita Stone.....	dis 10		
Washita Stone, Silps.....	dis 10		
Arkansas.....	dis 15		
SQUARES.			
Steel.....	dis 50		
Iron.....	dis 50		
Nickel Plated.....	dis 50		
Try Square and T Bevel.....	dis 50 & 10		
Diastion's Try Square and T Bevels.....	dis 40		
VISES.			
Solid Box.....	dis 50		
"Trenton.....	dis 45		
"Iron City Tool Works.....	dis 50		
Bench-Wilson's.....	dis 45		
"Trenton.....	dis 25		
"Parker's.....	dis 20		
"Prentiss.....	dis 25		
"Bonney's.....	dis 25		
Well Wheel.....	dis 60 & 10 & 10		

WIRE.			
Brass and Copper, list of June 10, 1880.....			
Bright and Annealed.....	Nos. 0, 18, dis 50 & 10		
Bright and Annealed.....	Nos. 19, 20, dis 55 & 10		
Bright and Annealed.....	Nos. 21, 22, dis 60 & 10		
Coppered.....	Nos. 0, 18, dis 45		
Galvanized, Nos. 0 to 18.....	market list dis 40		
Tinned, Nos. 0 to 18.....	dis 60		
Tinned Broom Wire, Nos. 18 to 25.....	dis 60		
Annealed Fence, Nos. 8 & 9.....	dis 55		
Annealed Grape, Nos. 10 to 14.....	dis 50 & 10		
Fence Staples, Galvanized.....	dis 70 & 1/2 c		
Japanese Barb Fence.....	dis 15 c		
Galvanized Barb Fence.....	dis 15 c		
Buck Thorn Galvanized.....	dis 7 c		
Picture Line Wire, Galvanized.....	dis 40		
Wire Cloth, green, drab and black.....	dis 25		
WRENCHES.			
American Adjustable.....	dis 45		
Baxter's Adjustable "S," list Jan. 1880.....	dis 20 & 10		
Baxter's Diagonal.....	dis 20 & 10		
Coe's Genuine.....	dis 50 & 10		
Coe's "Mechanics".....	dis 50 & 10		
Coe's Pattern, Malleable.....	dis 75		
Coe's Pattern, Wrought.....	dis 60 & 10		
Girard Standard.....	dis 50 & 10		
Girard Agt.....	dis 60 & 10		
Collins & Co.....	dis 50		
WRINGERS.			
Universal, XX, No. 2.....	dis 30		
Universal, XX, No. 2 1/2.....	dis 30		
Universal, XX, No. 3.....	dis 30		
Universal, XX, No. 4.....	dis 30		



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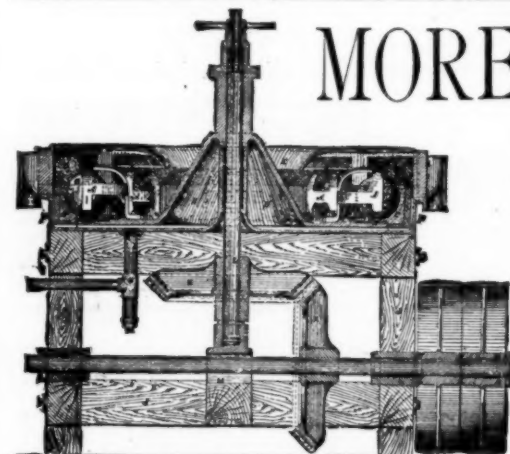
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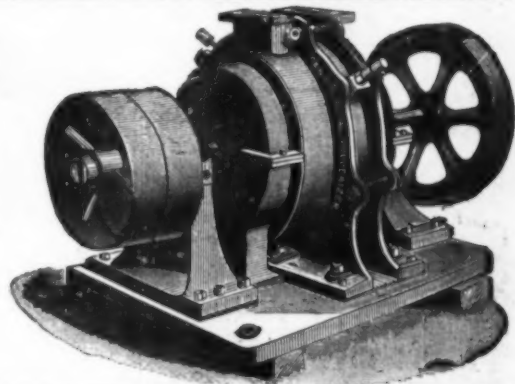
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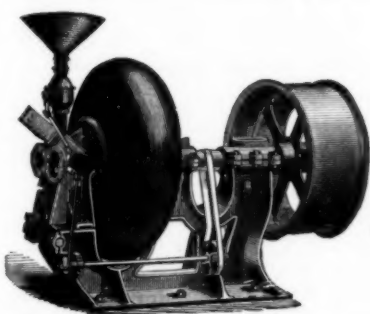
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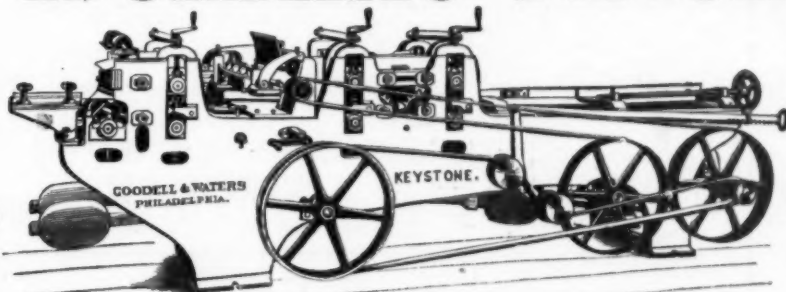
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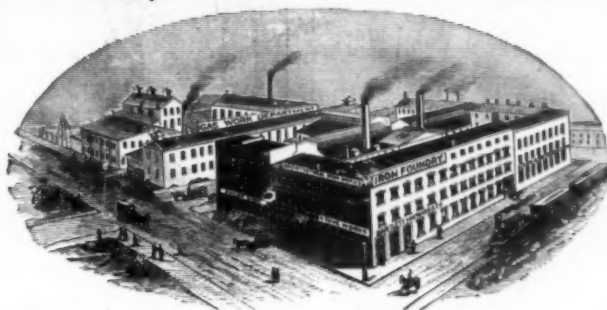
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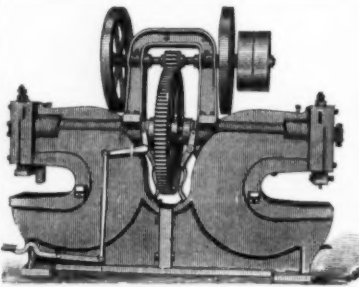
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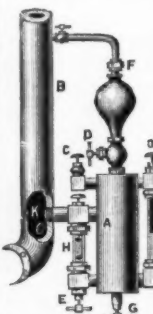
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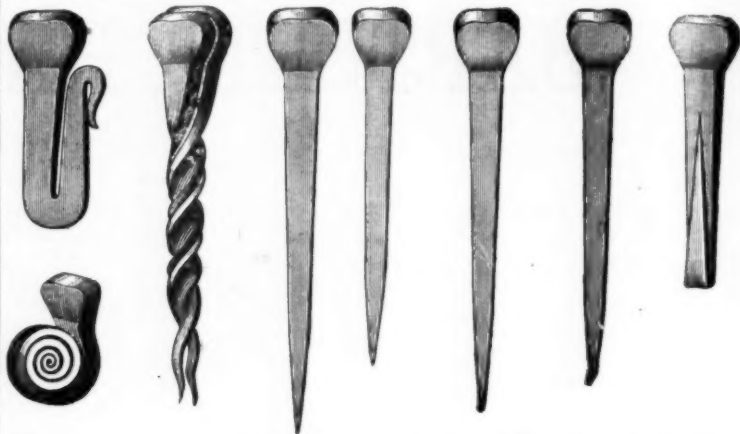
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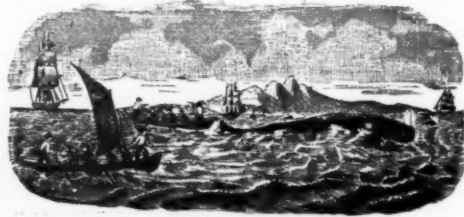
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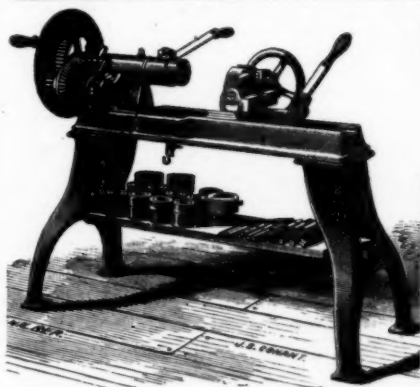
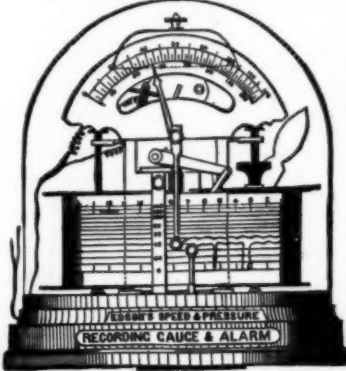
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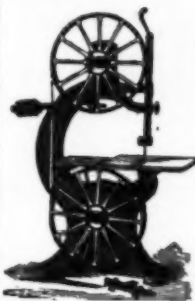
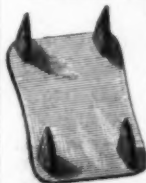
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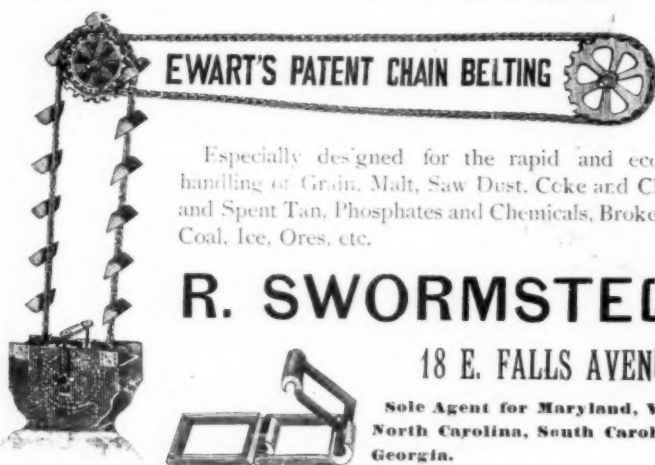
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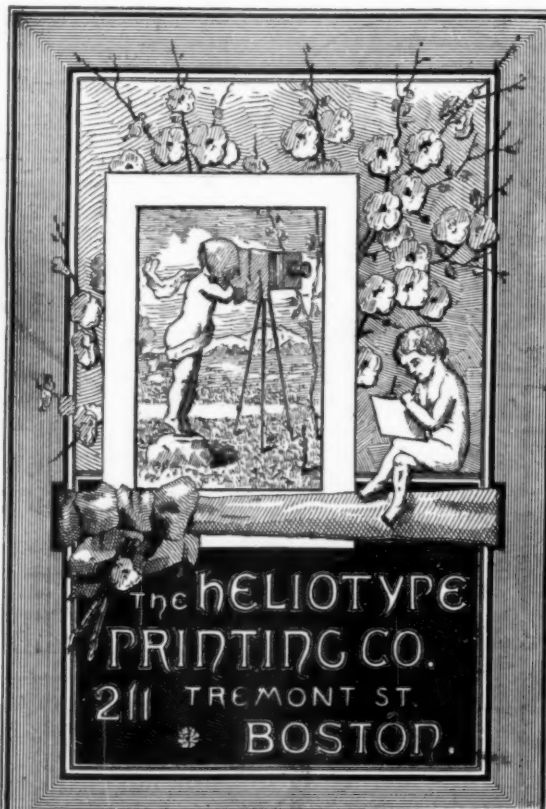
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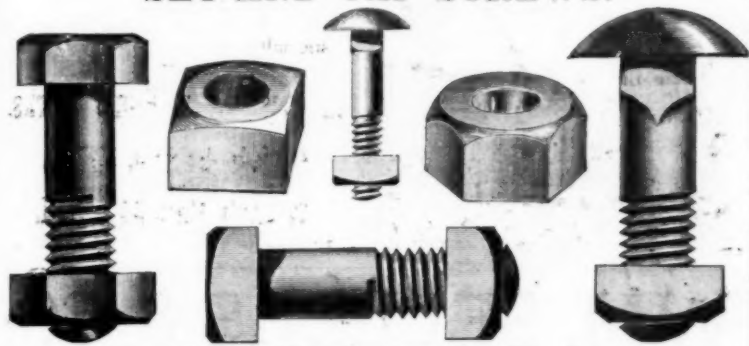
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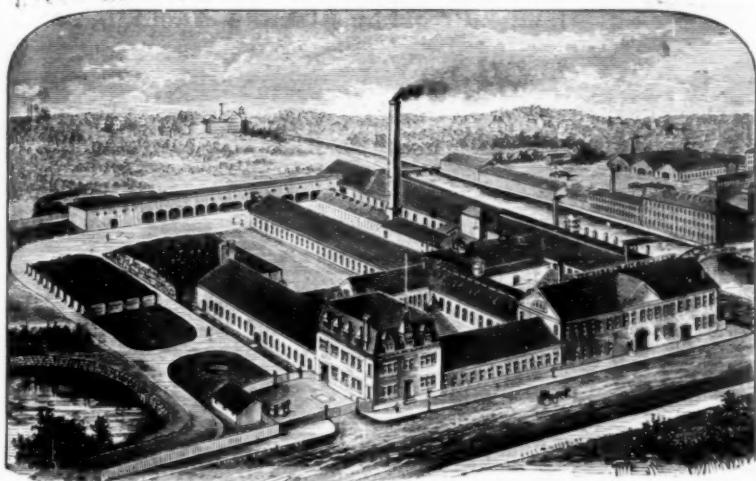
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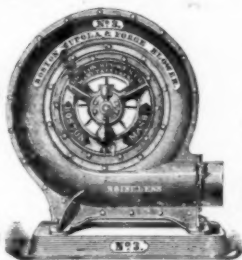
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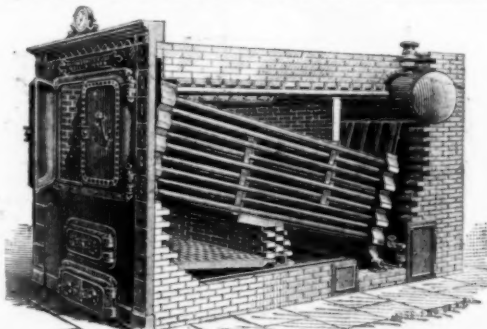
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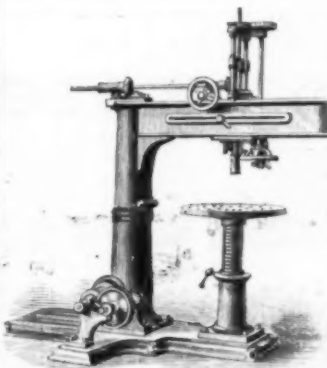
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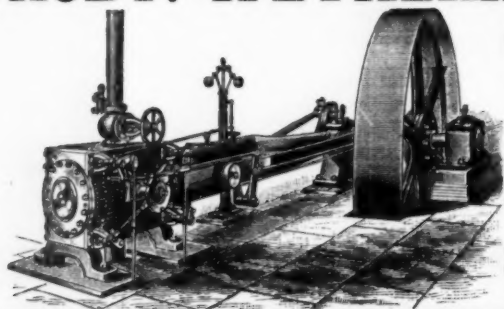
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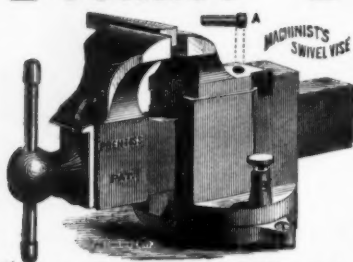
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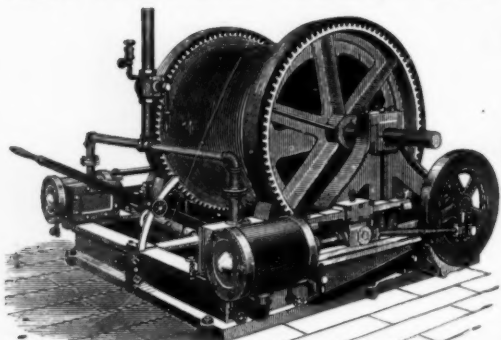
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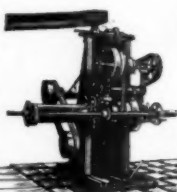
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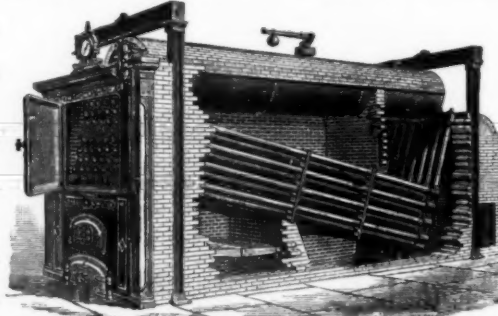
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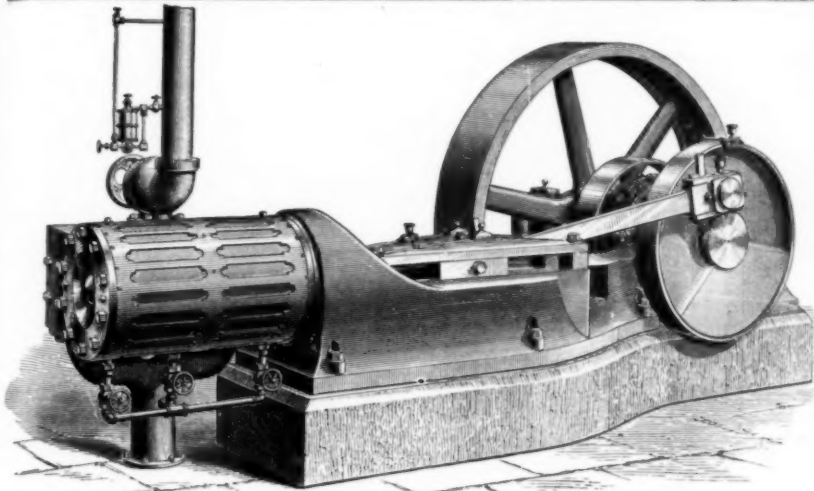
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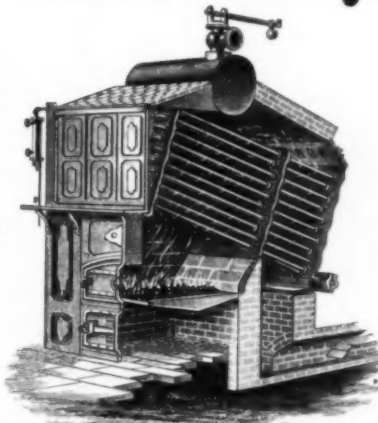
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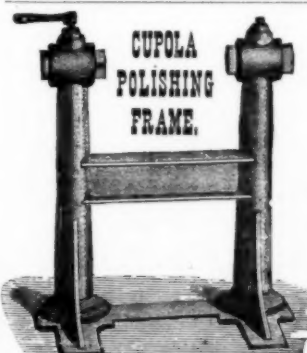
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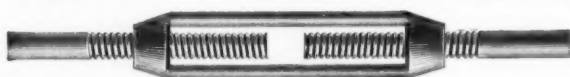
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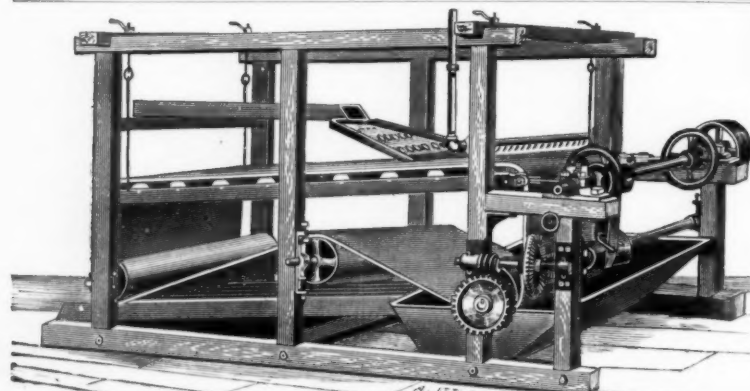
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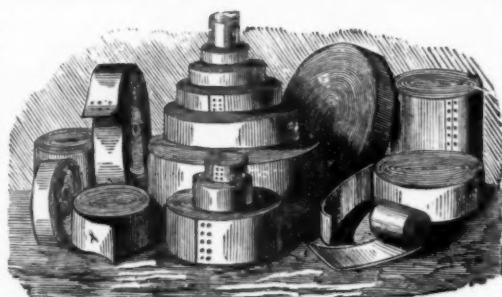
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